XM-7557

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
75watts/220watts per channel minimum continuous average power into 4ohms, 5channels driven from 20Hz to 20kHz with no more than 0.04%* total harmonic distortion per Car Audio Ad Hoc Committee Standards.

Other Specifications

Circuit system	Pure Direct Drive SEPP Pulse power supply
Inputs	RCA pin jacks
Outputs	Speaker terminals
Speaker impedance	2 – 8 Ω (F/Rch), 1** – 8 Ω (Subwoofer) 4 – 8 Ω (when used as a bridging amplifier, F/Rch)
Maximum outputs (Front/Rear + Subwoofer)	
	150 watts × 4 + 500 watts × 1 (at 4 Ω) 360 watts × 2 + 500 watts × 1 (at 4 Ω)
Rated outputs (supply voltage at 14.4 V*, 20 Hz – 20 kHz)	
Front/Rear:	75 watts × 4 (0.04 % THD, at 4 Ω) 90 watts × 4 (0.1 % THD, at 2 Ω) 180 watts × 2 (0.1 % THD, at 4 Ω)
Subwoofer:	Hi-voltage 220 watts (0.04 % THD, at 4Ω) Hi-voltage 280 watts (0.1 % THD, at 2 Ω) Hi-current 280 watts (0.1 % THD, at 1 Ω)
Frequency response	5 Hz – 100 kHz ($^{+3}_{-3}$ dB)
Harmonic distortion	0.005 % or less (at 1kHz, 4 Ω*)
Input level adjustment range	0.2 – 4.0 V
High-pass filter (× 1/× 10)	50 – 400 Hz/500 Hz – 4 kHz, –12 dB/oct
Low-pass filter (× 1/× 10)	50 – 400 Hz/500 Hz – 4 kHz, –12 dB/oct 50 – 200 Hz, –12 dB/oct (Subwoofer)
Low boost	0 – 10 dB (40 Hz) (Front/Rear)
Low boost and cut	0 – 10 dB (7 – 40 Hz) (Subwoofer)
Power requirements	12 V DC car battery (negative ground)
Power supply voltage	10.5 – 16 V
Current drain	at rated output: 81 A (4Ω HI-VOLTAGE mode) Remote input: 1.5 mA
Dimensions	Approx. 637 × 83.5 × 260 (303 with cover) mm (w/h/d) (25 $^{1}/_{8}$ × 3 $^{3}/_{8}$ × 10 $^{1}/_{4}$ in.) not incl. projecting parts and controls
Mass	Approx. 9.5 kg (20 lb. 15 oz.) not incl. accessories
Supplied accessories	Mounting screws (4) Terminal cover (1) Hexagonal wrench 3 mm ($^{1}/_{8}$ in) (1)

* NFB ON
** HI-CURRENT only

Design and specifications are subject to change without notice.

STEREO POWER AMPLIFER

MICROFILM

SONY®

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Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 1
SERVICE NOTE

Clearing the Protector During Repairs

• OVER CURRENT : Detects overcurrent during output.
• OFF SET : Detects DC offset at the speaker terminal.

1. Clearing the OVER CURRENT protector

• When the position of the MODE switch (S801/power board) is set to HI-CURRENT :
Cut the jumper wire JW230 of the amplifier board.

2. Clearing the OFF SET protector

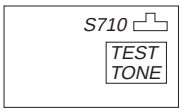
• Cut the jumper wire JW307 of the amplifier board.

3. TEST TONE Function

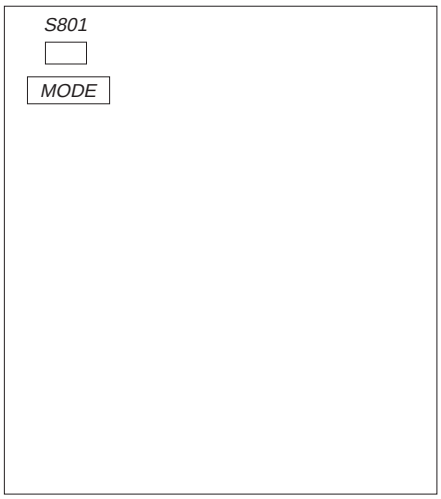
① Press the TEST TONE button (S710/SUB2 board) with the power ON. The amplifier is normal if sound is produced from the speaker.
② If no sound
: Problem causer by incorrect connecttion of the power supply system or sperker system.
: The signals input by the RCA cable before the amplifier system are abnormal.

Adjustment Location

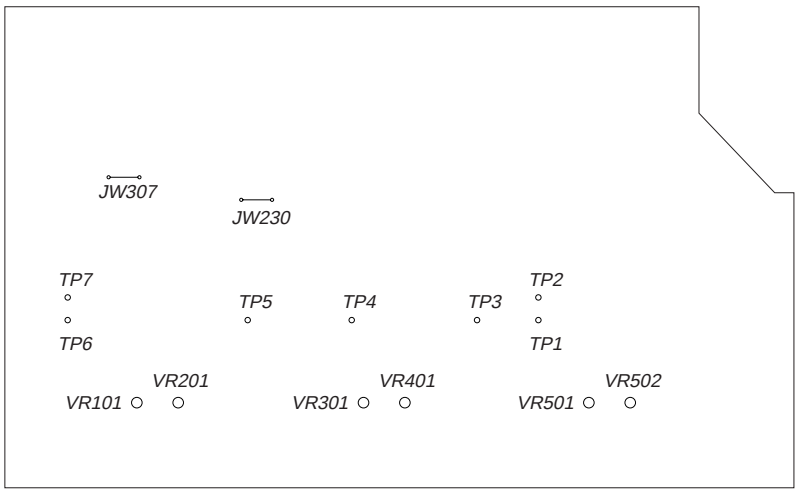
- SUB 2 BOARD - (Component side)



- POWER BOARD - (Component side)



- AMPLIFIER BOARD - (Component side)



SECTION 2
GENERAL

This section is extracted from instruction manual.

Connections

Precautions

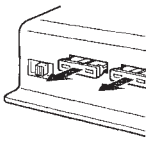
- This unit is designed for negative ground 12 V DC operation only.
- Use front/rear speakers with an impedance of 2 to 8 ohms (4 to 8 ohms when used as a bridging amplifier).
- Use a subwoofer with suitable impedance.
  — HI-CURRENT mode: 1 to 2 Ω.
  — HI-VOLTAGE mode: 2 to 8 Ω.
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers.
- Avoid installing the unit in areas subject to:
  — high temperatures such as from direct sunlight or hot air from the heater
  — rain or moisture
  — dust or dirt.
- If your car is parked in direct sunlight and there is a considerable rise in temperature inside the car, allow the unit to cool down before use.
- Be sure to install the unit horizontally so that the air duct of the cooling fan or its fin will not be covered with carpet etc.
- The cooling fan operates when the temperature inside the unit rises to a certain level. It is not a malfunction if the cooling fan does not operate when you turn on the power.
- If this unit is placed too close to the car radio or antenna, interference may occur. In this case, relocate the amplifier away from the car radio or antenna.
- If no power is being supplied to the master unit, check the connections.
- This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to test the protection circuit by covering the heat sink or connecting improper loads.
- Do not use the unit on a weak battery as its optimum performance depends on a good power supply.
- For safety reasons, keep your car audio volume moderate so that you can still hear sounds outside your car.

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

Warning

- When replacing the fuse, be sure to use one matching the amperage stated above the fuse holder. Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.
- If all four fuses are not used, the performance is limited, and the power may not be activated.



** Protection circuit*
This amplifier is provided with a protection circuit that activates in the following cases:
— when the unit is overheated
— when a DC current is generated
— when the speaker terminals are short circuited.
The color of the POWERIPROTECTOR indicator will change from green to amber, and the unit will shut down.
If this happens, turn off the connected equipment, take out the cassette tape or disc, and determine the cause of the malfunction. If the amplifier has overheated, wait until the unit cools down before use.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Caution

- Before making any connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Be sure to use speakers with an adequate power rating. If you use small capacity speakers, they may be damaged.
- Do not connect the ⊖ terminal of the speaker system to the car chassis, and do not connect the ⊖ terminal of the right speaker with that of the left speaker.
- Install the input and output cords away from the power supply lead as running them close together can generate some interference noise.
- This unit is a high-power amplifier. Therefore, it may not perform to its full potential if used with the speaker cords supplied with the car.
- If your car is equipped with a computer system for navigation or some other purpose, do not remove the ground wire from the car battery. If you disconnect the wire, the computer memory may be erased. To avoid short circuits when making connections, disconnect the +12 V power supply lead until all the other leads have been connected.

Connexions

Précautions

- Cet appareil est conçu pour fonctionner uniquement sur courant continu de 12 volts avec masse négative.
- Utilisez des haut-parleurs d'une impédance de 2 à 8 ohms (4 à 8 ohms lors de l'utilisation comme amplificateur en pont).
- Utilisez un subwoofer d'une impédance appropriée.
  — Mode HI-CURRENT: 1 à 2 Ω
  — Mode HI-VOLTAGE: 2 à 8 Ω
- Ne raccordez pas de haut-parleurs actifs (avec amplificateur intégré) aux bornes de haut-parleurs de cet appareil; ils pourraient être endommagés.
- N'installez pas l'appareil à un endroit exposé à:
  — de hautes températures comme sous le rayonnement direct du soleil ou près d'un conduit de chauffage
  — la pluie ou à l'humidité
  — de la poussière ou à des saletés.
- Si votre voiture était garée en plein soleil et que la température a considérablement augmenté à l'intérieur, laissez refroidir l'appareil avant de l'utiliser.
- Veillez à installer l'appareil horizontalement de façon à ce que le conduit d'air du ventilateur de refroidissement ou ses ailettes ne soit par recouvert par le tapis de sol, etc.
- Le ventilateur fonctionne lorsque la température interne de l'appareil atteint un certain niveau. Ce n'est pas anormal que le ventilateur ne fonctionne pas à la mise sous tension.
- Si cet appareil est placé trop près de l'autoradio et de l'antenne, il se peut que des interférences se produisent. Dans ce cas, éloignez l'amplificateur de l'autoradio ou de l'antenne.
- Si l'appareil principal n'est pas alimenté, vérifiez les connexions.
- Cet amplificateur de puissance intègre un circuit de protection* destiné à protéger les transistors et les haut-parleurs en cas de dysfonctionnement de l'amplificateur. N'essayez pas de tester le circuit de protection en recouvrant le dissipateur de chaleur ou en connectant des charges inappropriées.
- N'utilisez pas l'appareil sur une batterie faible, car sa performance maximale dépend d'une bonne alimentation en électricité.
- Pour des raisons de sécurité, écoutez l'autoradio à un volume modéré afin d'entendre les bruits extérieurs.

Remplacement du fusible

Si le fusible saute, vérifiez les connexions du fil d'alimentation et remplacez le fusible. S'il saute de nouveau, un mauvais circuit interne peut en être la cause. Dans ce cas, consultez votre concessionnaire Sony.

Avertissement

- En cas de remplacement du fusible, veillez à utiliser un fusible dont l'intensité correspond à celle inscrite sur le porte-fusible. N'utilisez jamais de fusible dont l'intensité dépasse celle du fusible fourni avec l'appareil, car vous risqueriez d'endommager l'appareil.
- Si les quatre fusibles ne sont pas utilisés, les performances s'en trouvent limitées et il se peut que le système ne puisse être mis sous tension.

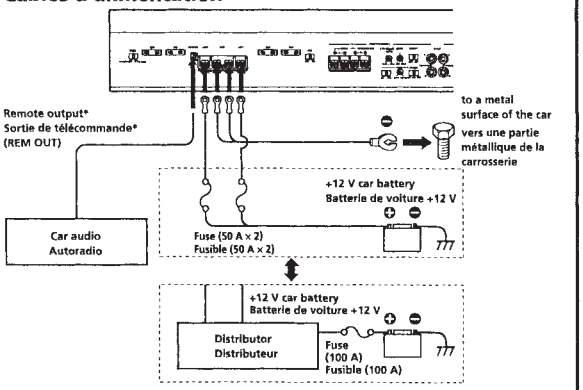
** Circuit de protection*
Cet amplificateur est équipé d'un circuit de protection qui s'active dans les cas suivants:
— Surchauffe de l'appareil
— Production d'un courant continu
— Court-circuit aux bornes des haut-parleurs.
La couleur du témoin POWERIPROTECTOR passe du vert à l'ambre et l'appareil s'éteint.
Si le cas se présente, coupez l'alimentation de l'appareil raccordé et éjectez la cassette ou le disque compact avant d'examiner la cause de la défaillance. Si l'amplificateur est trop chaud, attendez qu'il refroidisse.

Pour toute question ou problème qui ne serait pas traité dans ce manuel, consultez votre concessionaire Sony.

Attention

- Avant d'effectuer les connexions, débranchez le fil de masse de la borne de la batterie pour éviter un court-circuit.
- Utilisez des haut-parleurs d'une capacité adéquate. Si vous utilisez des haut-parleurs de faible capacité, ils risquent d'être endommagés.
- Ne raccordez pas la borne ⊖ des haut-parleurs à la carrosserie de la voiture ni la borne ⊖ du haut-parleur droit à celle du haut-parleur gauche.
- Eloignez les cordons d'entrée et de sortie du fil d'alimentation électrique pour éviter que des interférences ne se produisent.
- Cet appareil est un amplificateur de haute puissance et il peut ne pas atteindre sa puissance maximale si les cordons de haut-parleurs originaux de la voiture lui sont raccordés.
- Si votre voiture est équipée d'un ordinateur de bord pour la navigation ou à toute autre fin, ne débranchez pas le fil de masse de la batterie de la voiture. Si vous débranchez ce fil, toute la mémoire de l'ordinateur sera effacée. Pour éviter un court-circuit lorsque vous effectuez les branchements, branchez le fil d'alimentation de +12 V uniquement après avoir branché tous les autres fils.

Power Connection Leads
Câbles d'alimentation

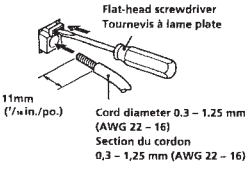


** If you have the factory original or some other car audio without a remote output on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.*
** Si vous disposez du modèle d'origine ou d'un autre autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de télécommande (REMOTE) à la prise d'alimentation accessoires.*

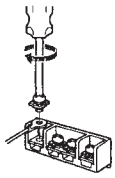
Notes on the power supply
- *Connect the +12 V power supply lead only after all the other leads have been connected.*
- ***Be sure to connect the ground lead of the unit securely to a metal surface of the car. A loose connection may cause the amplifier to malfunction.***
- *Be sure to connect the remote control lead of the car audio to the remote terminal.*
- *When using a car audio without a remote output on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.*
- *Use the power supply lead with a fuse attached (100 A).*
- *Place the fuse in the power supply lead as close as possible to the car battery.*
- *Make sure that the leads to be connected to the +12 V and GND terminals of this unit are larger than 6-Gauge (AWG-6) or have a sectional area of more than 13 mm².*
- *When using the optional RC-46 power amplifier connecting cord, consult that manual for proper use.*

Remarques sur l'alimentation électrique
- *Raccordez le câble d'alimentation +12 V uniquement après avoir réalisé toutes les autres connexions.*
- ***Raccordez correctement le fil de masse de l'appareil à une surface métallique de la voiture. Une connexion lâche peut provoquer un dysfonctionnement de l'amplificateur.***
- *Veillez à raccorder le fil de télécommande de l'autoradio à la borne de télécommande.*
- *Si vous utilisez un autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de la télécommande (REMOTE) à la prise d'alimentation accessoires.*
- *Utilisez un câble d'alimentation muni d'un fusible (100 A).*
- *Fixez le câble d'alimentation le plus près possible de la batterie de voiture.*
- *Vous devez raccorder des câbles de calibre supérieurs à 6-Jauge (AWG-6) ou d'une section supérieure à 13 mm² aux bornes +12 V et GND.*
- *Lorsque vous utilisez le cordon de raccordement pour amplificateur RC-46 en option, consultez le manuel pour une utilisation correcte.*

Make the terminal connections as illustrated below.


Flat-head screwdriver
Tournevis à lame plate
11mm
(7/16 in./po.)
Cord diameter 0.3 – 1.25 mm (AWG 22 – 16)
Section du cordon
0,3 – 1,25 mm (AWG 22 – 16)

Effectuez les connexions de la manière indiquée ci-dessous.



Note
Tighten the screws firmly, but be careful not to apply too much force as doing so may damage the screws.*

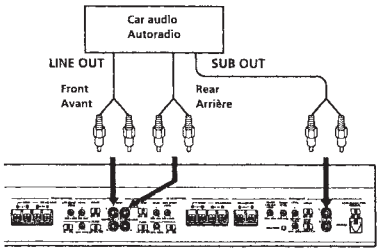
** The torque value should be less than 1 N•m.*

Remarque
Ne serrez pas trop fort la vis car vous pourriez l'endommager.*

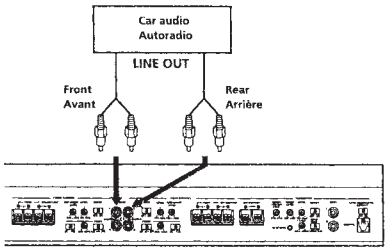
** Le couple de serrage devrait être inférieur à 1 N•m.*

Input Connections/Connexions d'entrée

Line Input Connection (with Speaker Connection 1) A
Connexion d'entrée de ligne (avec connexion de haut-parleur 1)



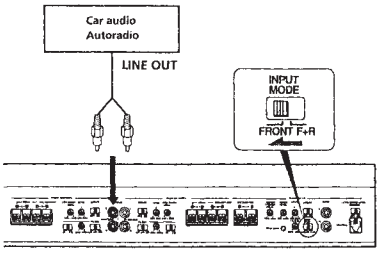
Line Input Connection (with Speaker Connection 1) B
Connexion d'entrée de ligne (avec connexion de haut-parleur 1)



Note
Make sure to set the INPUT MODE select switch to either "FRONT" or "F+R" (refer to "Location and Function of Controls".)

Remarque
Réglez le sélecteur INPUT MODE sur "FRONT" ou "F+R" (voir "Emplacement et fonction des commandes").

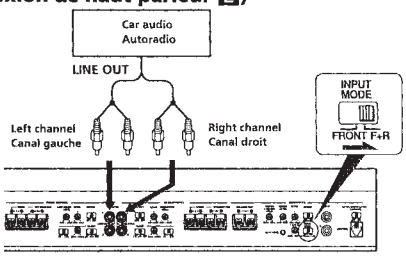
Line Input Connection (with Speaker Connection 1) C
Connexion d'entrée de ligne (avec connexion de haut-parleur 1)



Note
Make sure that the line output from the car audio is connected to the jack marked "FRONT INPUT" on the unit. In this system, the signals from FRONT INPUT are filtered through each circuit and output to the subwoofer and rear speaker.

Remarque
Assurez-vous que la sortie de ligne de l'autoradio est raccordée à la prise "FRONT INPUT" de l'appareil.
Dans ce système, les signaux de FRONT INPUT sont filtrés par chaque circuit et sortie vers le subwoofer et le haut-parleur arrière.

Line Input Connection (with Speaker Connection 2) D
Connexion d'entrée de ligne (avec connexion de haut-parleur 2)



Note
The INPUT MODE select switch must be set to "F+R"
(refer to "Location and Function of Controls".)

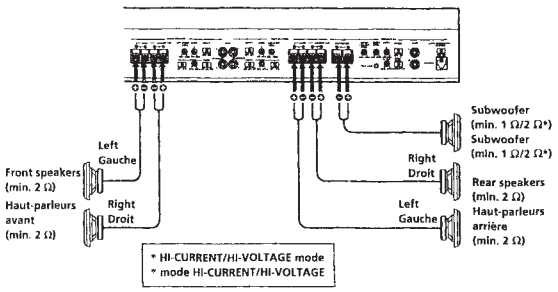
Remarque
Le sélecteur INPUT MODE doit être réglé sur "F+R" (voir "Emplacement et fonction des commandes").

Speaker Connections/Raccordement de haut-parleurs

5-Speaker System (with Input Connection A, B or C) 1
Système à 5 haut-parleurs (avec connexion d'entrée A, B ou C)

For details on the settings of switches and controls, refer to "Location and Function of Controls."

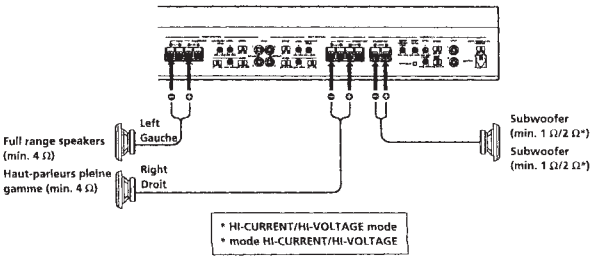
Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".



3-Speaker System (with Input Connection D) 2
Système à 3 haut-parleurs (avec connexion d'entrée D)

For details on the settings of switches and controls, refer to "Location and Function of Controls."

Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".



Features

- Maximum power output of 150 watts × 4 + 500 watts (at 4 ohms).
- Features a 2 channel-input / 5 channel-output function that makes it possible to carry a 2-way multi system even with a single line output from the car stereo.
- Built-in variable filter corresponds to a wide range, from 50 Hz to 400 Hz/500 Hz to 4 kHz. (× 1/ × 10 switch)
- Built-in variable LPF (Low-pass filter), HPF (High-pass filter) and low boost circuit.
- The DIRECT switch can be used to bypass the low-pass filter, high-pass filter for more enjoyable high quality sound.
- Possible to switch between HI-CURRENT mode (1 - 2 Ω) and HI-VOLTAGE mode (2 - 4 Ω) for subwoofer.
- Negative Feed Back (ON/OFF) switchable.
- Independent voltage amplifier power supply.
- Protection circuit and indicator are provided.
- Pulse power supply* for stable, regulated output power.

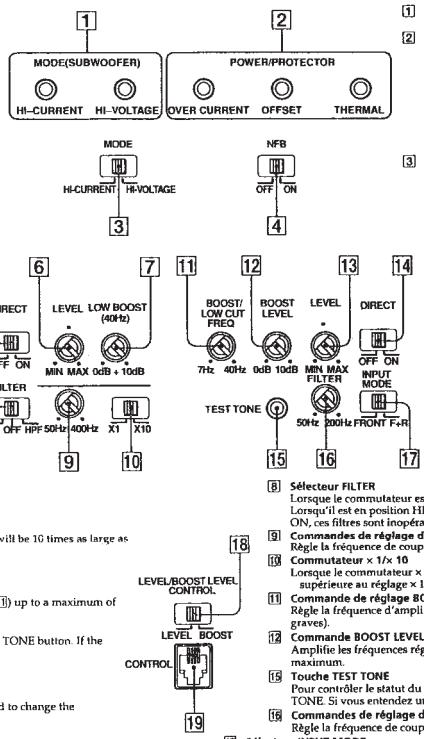
* *Pulse power supply*
This unit has a built-in power regulator which converts the power supplied by the DC 12 V car battery into high speed pulses using a semiconductor switch. These pulses are stepped up by the built-in pulse transformer and separated into both positive and negative power supplies before being converted into direct current again. This is to regulate fluctuating voltage from the car battery. This light weight power supply system provides a highly efficient power supply with a low impedance output.

Caractéristiques

- Puissance de sortie maximale de 150 watts × 4 + 500 watts (à 4 ohms).
- Intègre une fonction d'entrée à 2 canaux/sortie à 5 canaux compatible avec un multisystème à 2 voies même avec une sortie de ligne signal via la stéréo.
- Le filtre variable intégré correspond à une large plage allant de 50 Hz à 400 Hz/500 Hz à 4 kHz (commutateur × 1/× 10).
- Filtre passe-bas (LPF), filtre passe-haut (HPF) variables et circuit d'amplification des graves intégrés.
- Le commutateur DIRECT peut être utilisé pour contourner le filtre passe-bas, le filtre passe-haut, et pour le circuit d'égalisation, afin d'optimiser la qualité sonore.
- Il est possible de commuter le mode HI-CURRENT (1 – 2 Ω) et le mode HI-VOLTAGE (2 – 4 Ω) pour le subwoofer.
- Rétro-action négative (ON/OFF) commutable.
- Alimentation indépendante de l'amplificateur de tension.
- Circuit de protection et indicateur fournis.
- Alimentation électrique par impulsions* pour une puissance de sortie stable, régulée.

* *Alimentation électrique par impulsions*
Cet appareil est équipé d'un régulateur de puissance intégré qui convertit la puissance fournie par une batterie de voiture de 12 V CC en impulsions ultra-rapides au moyen d'un commutateur à semi-conducteur. Ces impulsions sont amplifiées par le transformateur d'impulsions intégré et séparées en alimentation positive et négative avant d'être reconverties en courant continu. Ce processus permet de compenser les fluctuations de tension provenant de la batterie de la voiture. Ce système d'alimentation de faible poids assure une alimentation électrique très efficace pour une sortie d'impédance faible.

Location and Function of Controls



1 **MODE (Subwoofer) indicator**
Indicates HI-CURRENT mode or HI-VOLTAGE mode.

2 **POWER/PROTECTOR indicator**
- OVER CURRENT lights up in green during normal operation. The color will change from green to amber when receiving a powerful signal.
- OFFSET lights up green during normal operation. The color will change from green to amber when the voltage going out to the Speaker terminal or the Pin Jack is too high .
- THERMAL lights up in green during normal operation. The color will change from green to amber when the temperature rises to an unsafe level. The color will return to green when the temperature returns to normal.

3 **MODE (HI-CURRENT/HI-VOLTAGE) switch**
- In HI-CURRENT mode the speaker impedance is 1 to 2 Ω. This mode sends a signal via parallel circuits for a powerful sound.
- In HI-VOLTAGE mode the speaker impedance is 2 to 4 Ω. In this mode you can enjoy clear sound with the dynamic range.

4 **NFB switch**
When the NFB (Negative Feed Back) switch is set to ON, the NFB circuits are effective at reducing the distortion produced by the amplifier.
Tip
The NFB circuits are effective at reducing the static characteristic distortion produced by the amplifier, but are susceptible to the affects of sound muddiness from the reverse electromotive force produced by the speakers.

5 14 **DIRECT switch**
When the DIRECT switch is set to ON, the signal will not go through the low-pass filter, high-pass filter, or low boost circuit.

6 13 **LEVEL adjustment control**
The input level can be adjusted with this control when using source equipment made by other manufacturers. Turn it to MAX when the output level of the car audio seems low. To reduce noise, turn the LEVEL control (gain) of the amplifier to MIN and the volume of the car audio up.

7 **LOW BOOST level control (See Fig.1)**
Turn this control to boost the frequencies around 40 Hz to a maximum of 10 dB.

8 **FILTER select switch**
When the switch is in the LPF position, the filter is set to low-pass. When in the HPF position, the filter is set to high-pass. When the DIRECT switch is set to ON, these filters do not work.

9 **Cut-off frequency adjustment control (FRONT/REAR) (See Fig.2)**
Sets the cut-off frequency for the low-pass or high-pass filters (50 – 400 Hz).

10 **× 1/× 10 switch**
When the × 1/× 10 switch is set to × 10 , the established cut-off frequency (9) will be 10 times as large as the × 1 setting.

11 **BOOST/LOW CUT FREQ (Subsonic Filter) adjustment control (See Fig.3)**
Sets the boost frequency (7 – 40 Hz) for BOOST LEVEL (low boost level) control.

12 **BOOST LEVEL (Low boost level) control**
Amplifies the frequencies set by BOOST/LOW CUT FREQ adjustment control (11) up to a maximum of 10dB.

15 **TEST TONE button**
To check the system's status, activate the built in transmitter then press the TEST TONE button. If the tone is heard, the unit is functioning normally.

16 **Cut-off frequency adjustment control (SUBWOOFER) (See Fig.4)**
Sets the cut-off frequency for the subwoofer (50 – 200 Hz).

17 **INPUT MODE select switch**
When no input lead is connected to SUBWOOFER INPUT, the switch can be used to change the SUBWOOFER OUTPUT as follows.
FRONT : Outputs the signal that has been input to the FRONT input jack.
F+R : Outputs the signal that has been input to the FRONT and REAR input jacks.

18 **Subwoofer LEVEL/BOOST LEVEL CONTROL select switch (US model only)**
Selects LEVEL or BOOST to adjust the level or the boost level of the subwoofer from the connected subwoofer level controller. For details on the optional Subwoofer level controller, consult your nearest Sony dealer.

19 **Subwoofer LEVEL/BOOST LEVEL CONTROL connecting terminal (US model only)**
Connects the optional subwoofer controller to this terminal.

Note
If you do not use the high-pass filter and low-pass filter, set the DIRECT switch to ON for more enjoyable high quality sound.

Emplacement et fonction des commandes

1 **Indicateur MODE**
L'indicateur signale le mode activé : HI-CURRENT ou HI-VOLTAGE.

2 **Indicateur POWER/PROTECTOR**
- OVER CURRENT s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lors de la réception d'un signal puissant.
- OFFSET s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la tension transmise via la borne de haut-parleurs ou la prise à broche est trop élevée.
- THERMAL s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la température dépasse le niveau de sécurité. La couleur repasse au vert dès que la température est revenue à un niveau normal.

3 **Commutateur de MODE (HI-CURRENT/HI-VOLTAGE)**
- En mode HI-CURRENT, l'impédance de haut-parleur est de 1 à 2 Ω. Ce mode transmet un signal via des circuits parallèles pour créer un son de forte amplitude.
- En mode HI-VOLTAGE, l'impédance de haut-parleur est de 2 à 4 Ω. Ce mode vous permet d'obtenir un son clair dans la plage dynamique.

4 **Commutateur NFB**
Lorsque le commutateur NFB (rétroaction négative) est réglé sur ON, les circuits NFB réduisent efficacement les distorsions produites par l'amplificateur.
Conseil
Les circuits NFB réduisent efficacement les distorsions statiques produites par l'amplificateur, mais sont sensibles aux effets d'altération du son causés par la force électromotrice inverse produite par les haut-parleurs.

5 14 **Commutateur DIRECT**
Lorsque le commutateur DIRECT est réglé sur ON, le signal ne passe pas par le filtre passe-bas, le filtre passe-haut et le circuit d'égalisation.

6 13 **Commande de réglage LEVEL**
Le niveau d'entrée peut se régler avec cette commande lors de l'utilisation d'équipements source d'autres fabricants. Mettez-le sur MAX lorsque le niveau de sortie de l'installation audio paraît faible. Pour réduire les parasites, tournez la commande LEVEL (gain) de l'amplificateur sur MIN et augmentez le volume sur l'autoradio.

7 **Commande de niveau LOW BOOST (Voir Fig.1)**
Tournez cette commande pour amplifier les fréquences autour de 40 Hz à un maximum de 10 dB.

8 **Sélecteur FILTER**
Lorsque le commutateur est en position LPF, le filtre est mis sur passe-bas.
Lorsqu'il est en position HPF, le filtre est mis sur passe-haut. Lorsque le commutateur DIRECT est réglé sur ON, ces filtres sont inopérants.

9 **Commandes de réglage de la fréquence de coupure (FRONT/REAR) (Voir Fig.2)**
Règle la fréquence de coupure (50 – 400 Hz) des filtres passe-bas ou passe-haut.

10 **Commutateur × 1/× 10**
Lorsque le commutateur × 1/× 10 est réglé sur × 10, la fréquence de coupure réglée (9) est dix fois supérieure au réglage × 1.

11 **Commande de réglage BOOST/LOW CUT FREQ. (filtre subsonique) (Voir Fig.3)**
Règle la fréquence d'amplification (7 – 40 Hz) pour la commande BOOST LEVEL (niveau d'amplification des graves).

12 **Commande BOOST LEVEL (niveau d'amplification des graves)**
Amplifie les fréquences réglées à l'aide de la commande BOOST/LOW CUT FREQ. (11) de 10 dB au maximum.

15 **Touche TEST TONE**
Pour contrôler le statut du système, activez le transmetteur intégré et appuyez ensuite sur la touche TEST TONE. Si vous entendez une tonalité, c'est que l'appareil fonctionne normalement.

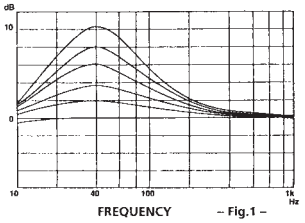
16 **Commandes de réglage de la fréquence de coupure (SUBWOOFER) (Voir Fig.4)**
Règle la fréquence de coupure (50 – 200 Hz) des subwoofers.

17 **Sélecteur INPUT MODE**
Si aucun fil d'entrée n'est raccordé à SUBWOOFER INPUT, le sélecteur peut être utilisé pour changer SUBWOOFER OUTPUT comme suit.
FRONT: Sortie du signal entré via la prise d'entrée FRONT.
F+R: Sortie du signal entré via les prises d'entrée FRONT et REAR.

18 **Sélecteur Subwoofer LEVEL/BOOST LEVEL CONTROL (modèle pour les USA uniquement)**
Si la commande de niveau de subwoofer en option est raccordée à cette borne, vous pouvez régler le niveau du subwoofer. Pour plus de détails sur la commande de niveau de subwoofer en option, consultez votre revendeur Sony

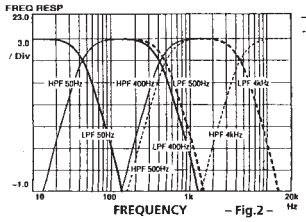
19 **Borne de connexion Subwoofer LEVEL/BOOST LEVEL CONTROL (modèle pour les USA uniquement)**
Branche la commande de subwoofer en option sur cette borne.
Remarque
Si vous n'utilisez pas le filtre passe-haut et le filtre passe-bas réglez le commutateur DIRECT sur ON pour exploiter pleinement la qualité sonore.

LOW BOOST (FRONT/REAR)



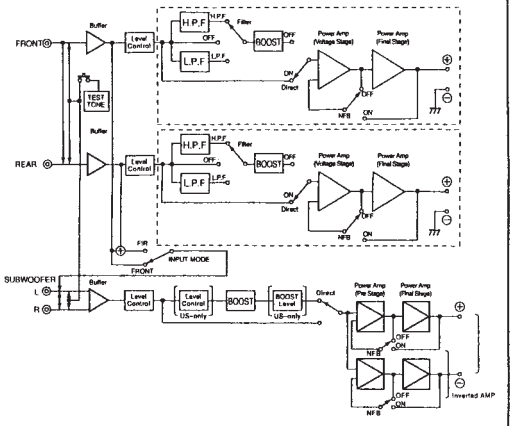
– Fig.1 –

Cut-off frequency/Fréquence de coupure (FRONT/REAR)

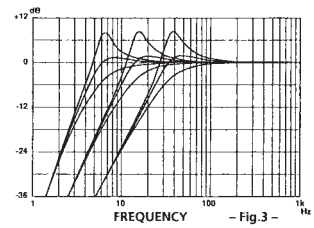


– Fig.2 –

Circuit Diagram/Schéma du circuit

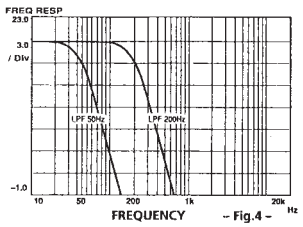


BOOST/LOW CUT (SUBWOOFER)



– Fig.3 –

Cut-off frequency/Fréquence de coupure (SUBWOOFER)

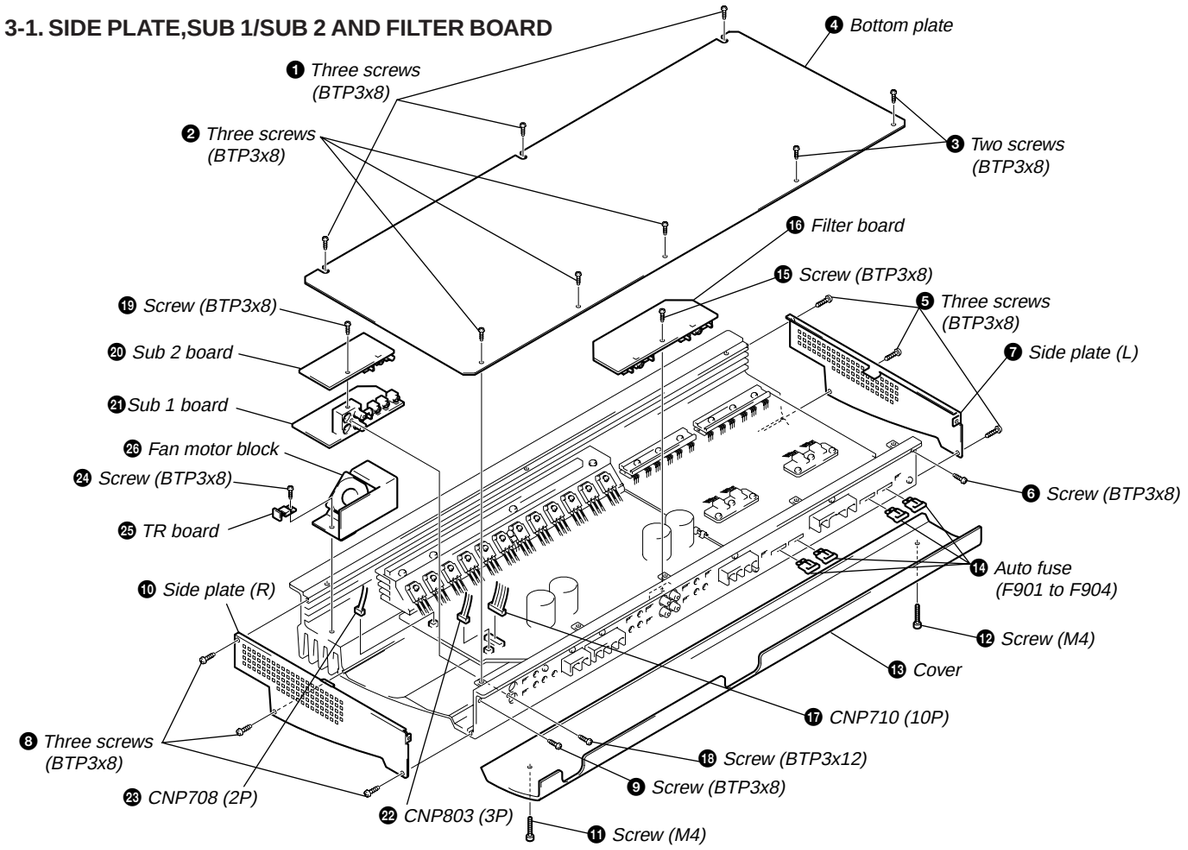


– Fig.4 –

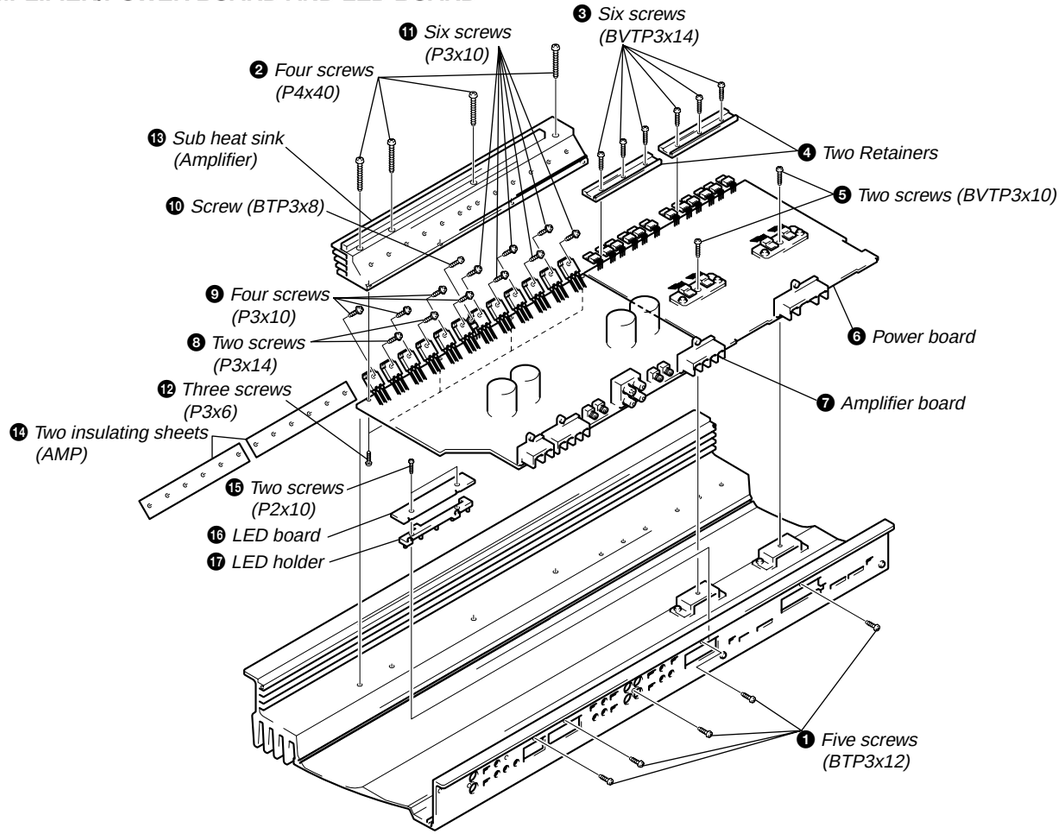
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

3-1. SIDE PLATE,SUB 1/SUB 2 AND FILTER BOARD



3-2. AMPLIFIER/POWER BOARD AND LED BOARD



SECTION 4
ELECTRICAL ADJUSTMENT

IDLING CURRENT ADJUSTMENT

• Perform adjustments in the HI-VOLTAGE mode.

① Adjustment point
Semi-fixed resistors VR101, VR201, VR301, VR401, VR501, VR502 of amplifier board

② Precautions on adjustments
1. Set the RCA input terminal to open.
2. Apply a voltage of 14.4V between the +12V terminal, REMOTE terminal, and GND terminal.
3. Rotate the above semi-fixed resistors completely in the counter-clockwise direction while observing the component side.
4. Check that the voltage at the adjustment point becomes 0 mV in step 2.
5. Fine adjustments may be required according to the characteristics of the MOS-FET used.

• When adjusting the idling current
Rotating the semi-fixed resistor in the clockwise direction: Increases the idling current
Rotating the semi-fixed resistor in the counterclockwise direction: Decreases the idling current

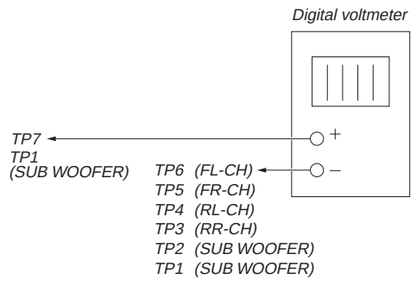
* Take note that rotating excessively in the clockwise direction will increase the idling current suddenly.

③ Approximate adjustment values
Adjust as follows so that the following voltages become 1.2 to 0.3 mV around 0.7 mV .

FL channel:
Voltage between TP7 and TP6: Use VR101 of the amplifier board
FR channel:
Voltage between TP7 and TP5: Use VR201 of the amplifier board
RL channel:
Voltage between TP7 and TP4: Use VR301 of the amplifier board
RR channel:
Voltage between TP7 and TP3: Use VR401 of the amplifier board

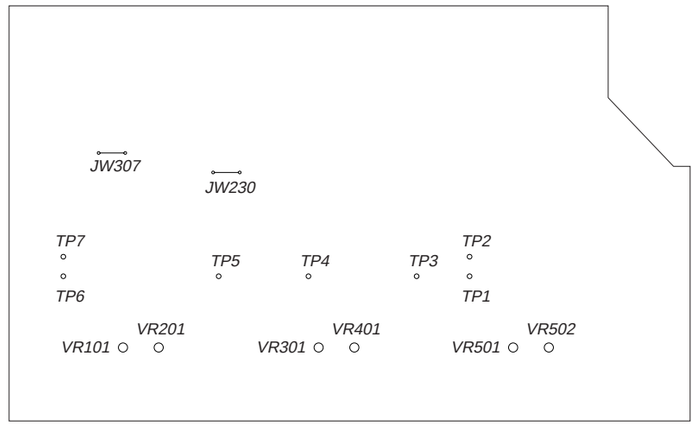
SUBWOOFER Channels:
First, adjust so that the voltage between TP1 and TP2 becomes 1.2 to 0.3 mV around 0.7 mV using VR501 of the amplifier board.
Next, adjust so that the voltage between TP1 and TP2 becomes 2.4 to 0.6 mV around 1.4 mV using VR502 of the amplifier board."

Connection :



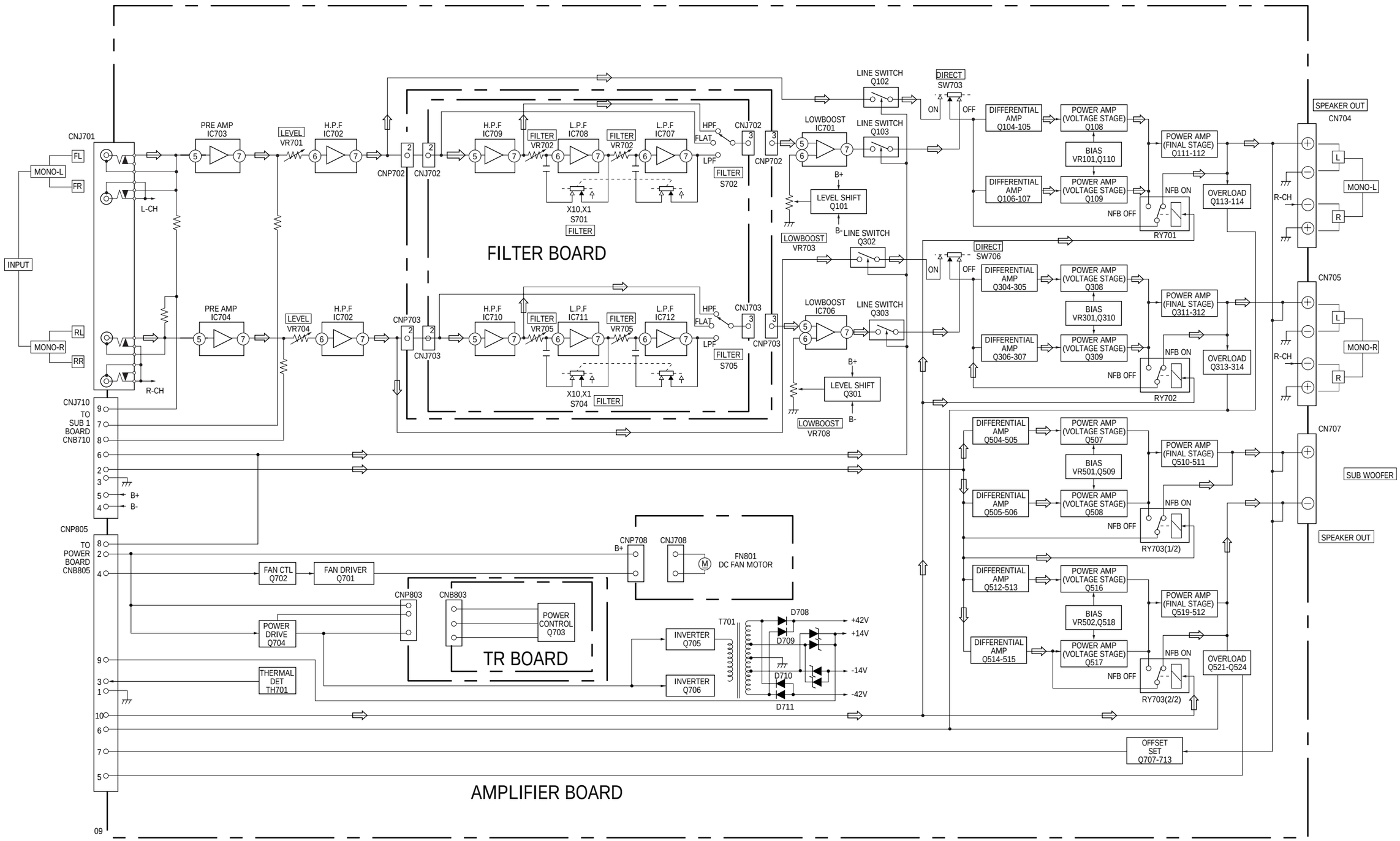
Adjustment Location

– AMPLIFIER BOARD – (Component side)



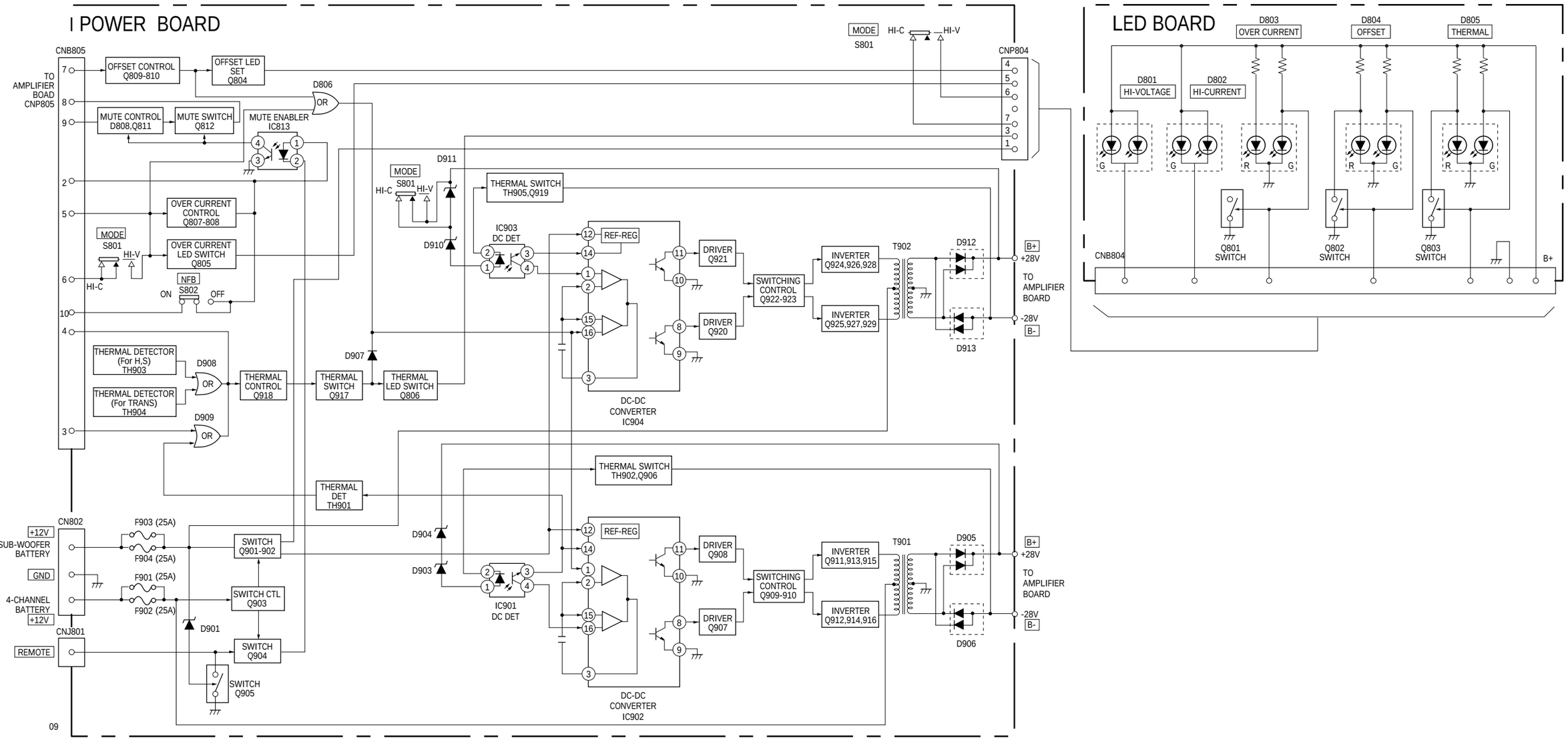
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM – AMPLIFIER SECTION –

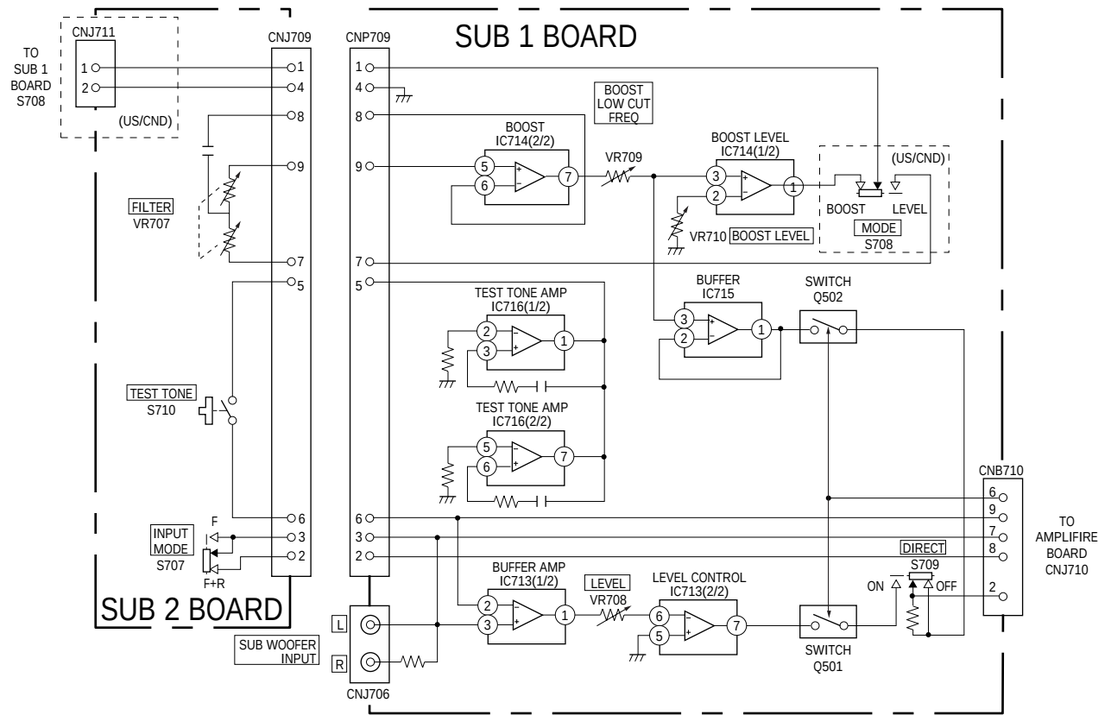


• Signal path
⇨ : Audio

5-2. BLOCK DIAGRAM – POWER SECTION –



5-3. BLOCK DIAGRAM – SUB 1/SUB 2 SECTION –



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

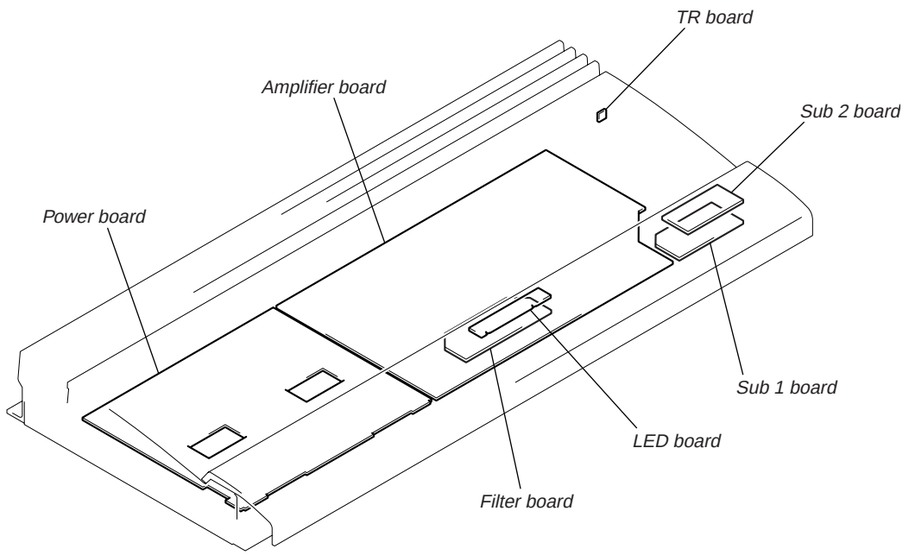
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Powr voltage is dc 14.4V and fed with regulated dc power supply from +12V and REMOTE terminals.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: POWER ON
  * : Impossible to mersure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO

For printed wiring boards.

Note:

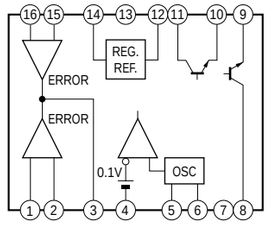
- o——— : parts extracted from the component side.

• CIRCUIT BOARDS LOCATION



5-4. IC BLOCK DIAGRAM

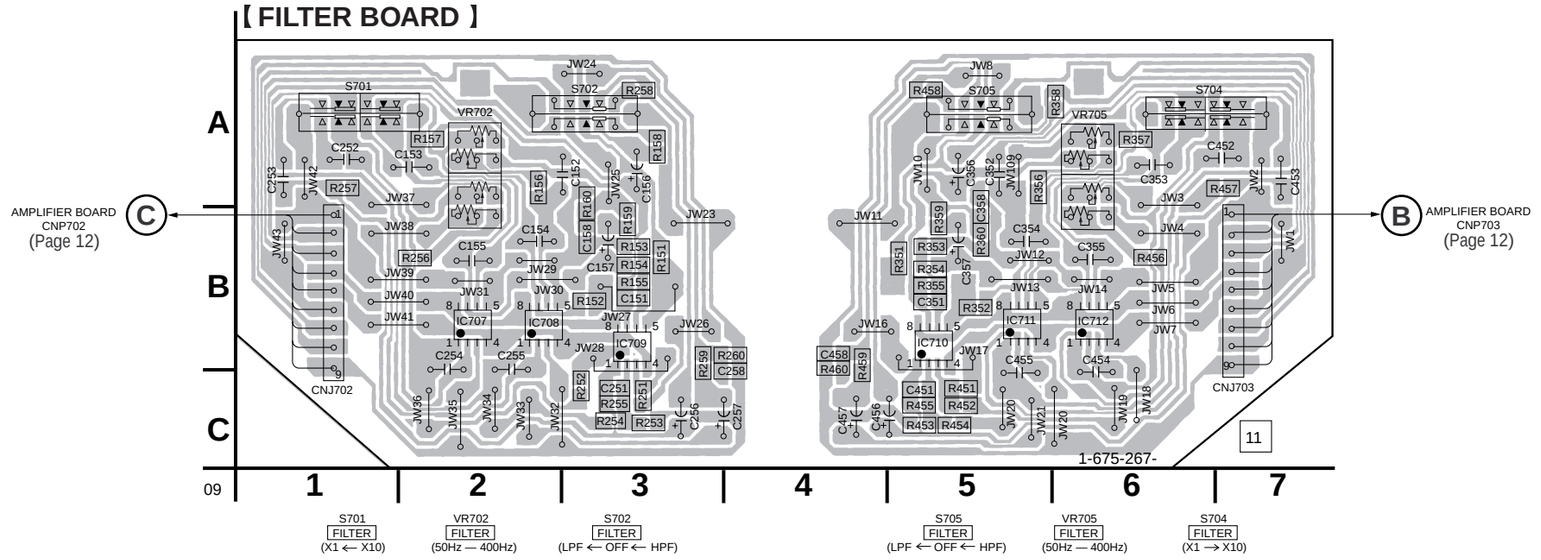
- **POWER section**
  IC902, 904 µPC494G2

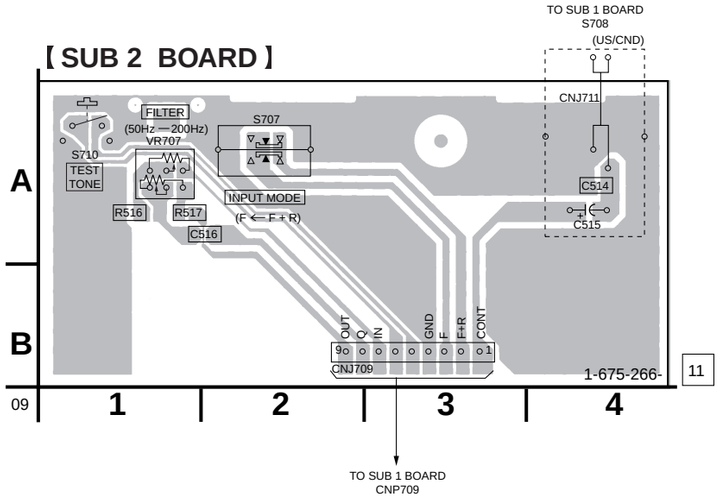


5-5. PRINTED WIRING BOARD – FILTER/SUB 1/SUB 2 SECTION –

- **Semiconductor Location**

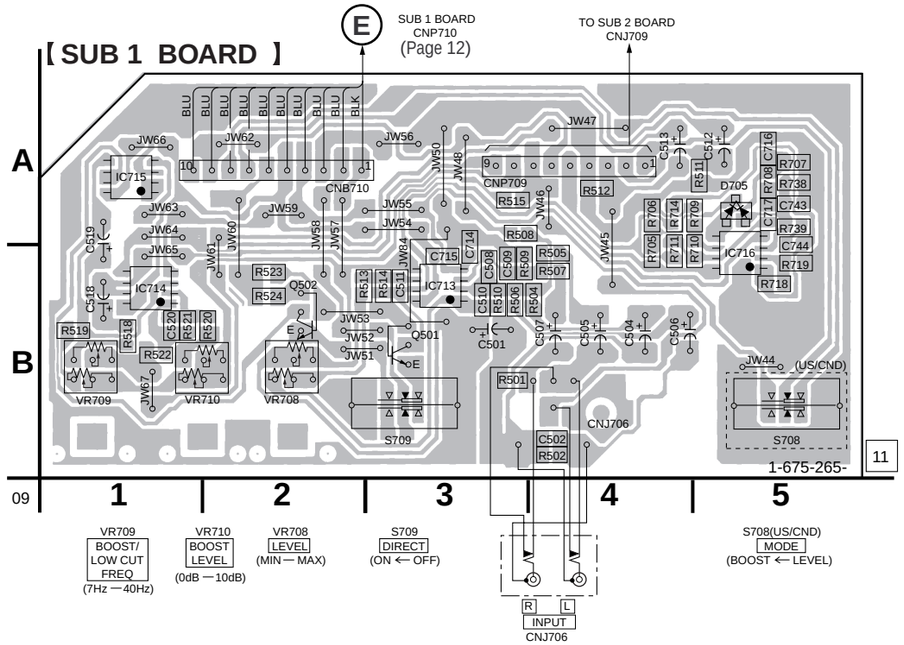
Ref. No.	Location
IC707	B-2
IC708	B-2
IC709	B-3
IC710	B-5
IC711	B-5
IC712	B-6





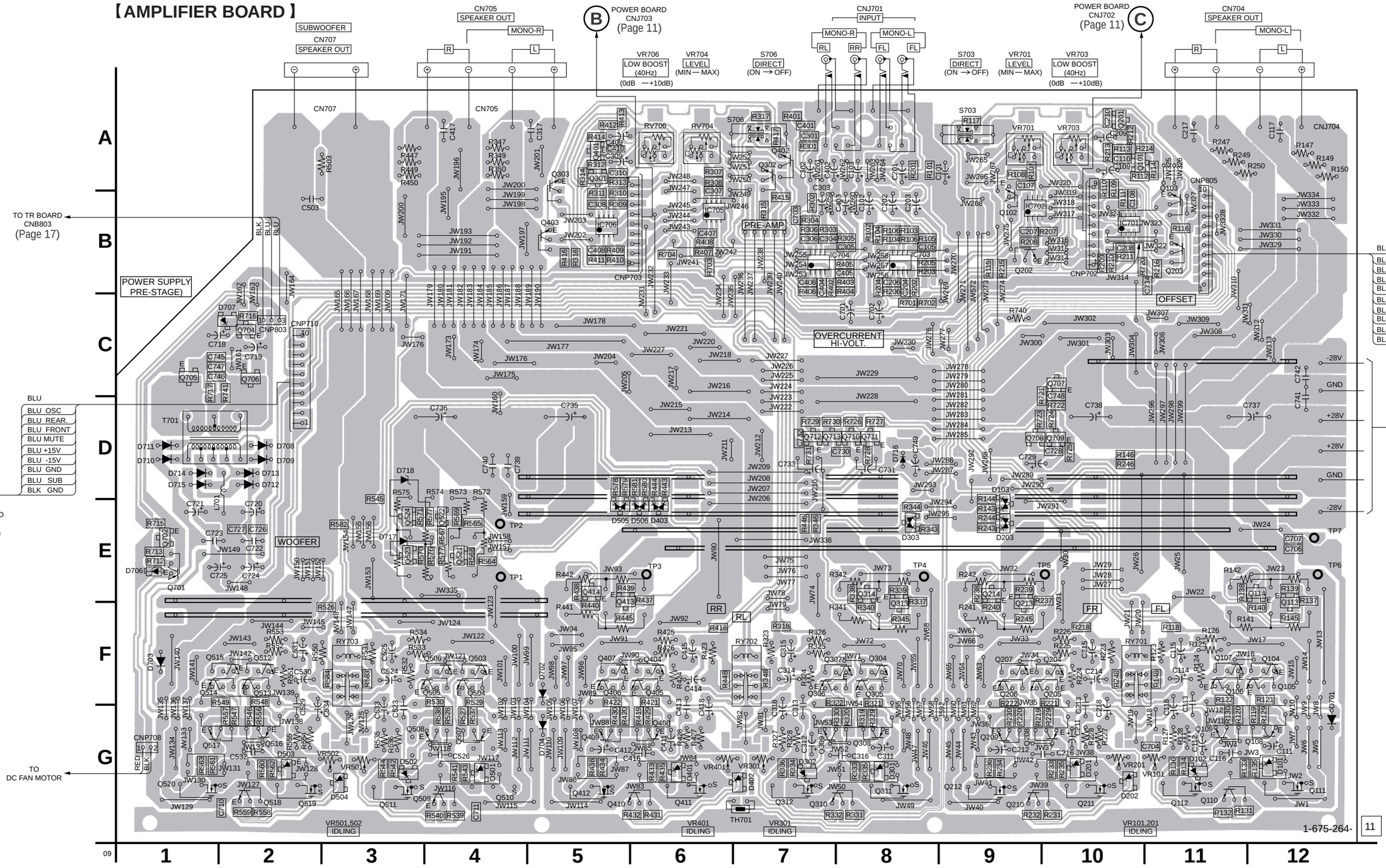
- **Semiconductor Location**

Ref. No.	Location
D705	A-5
IC713	B-3
IC714	B-1
IC715	A-1
IC716	B-5
Q501	B-3
Q502	B-2



5-6. PRINTED WIRING BOARD – AMPLIFIER SECTION –

【AMPLIFIER BOARD】

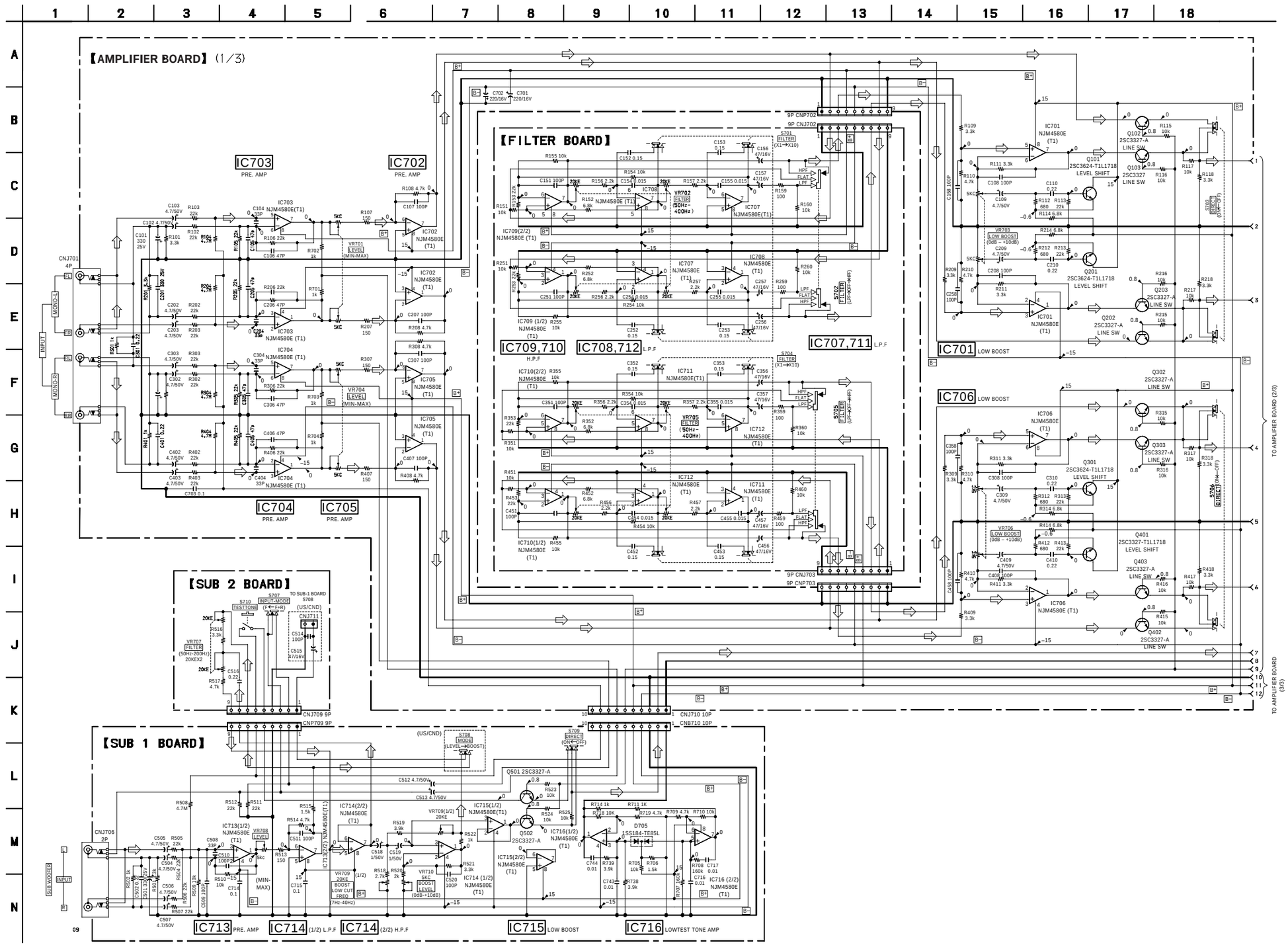


5-7. SCHEMATIC DIAGRAM – AMPLIFIER (1/3)/FILTER/SUB 1/SUB 2 SECTION –

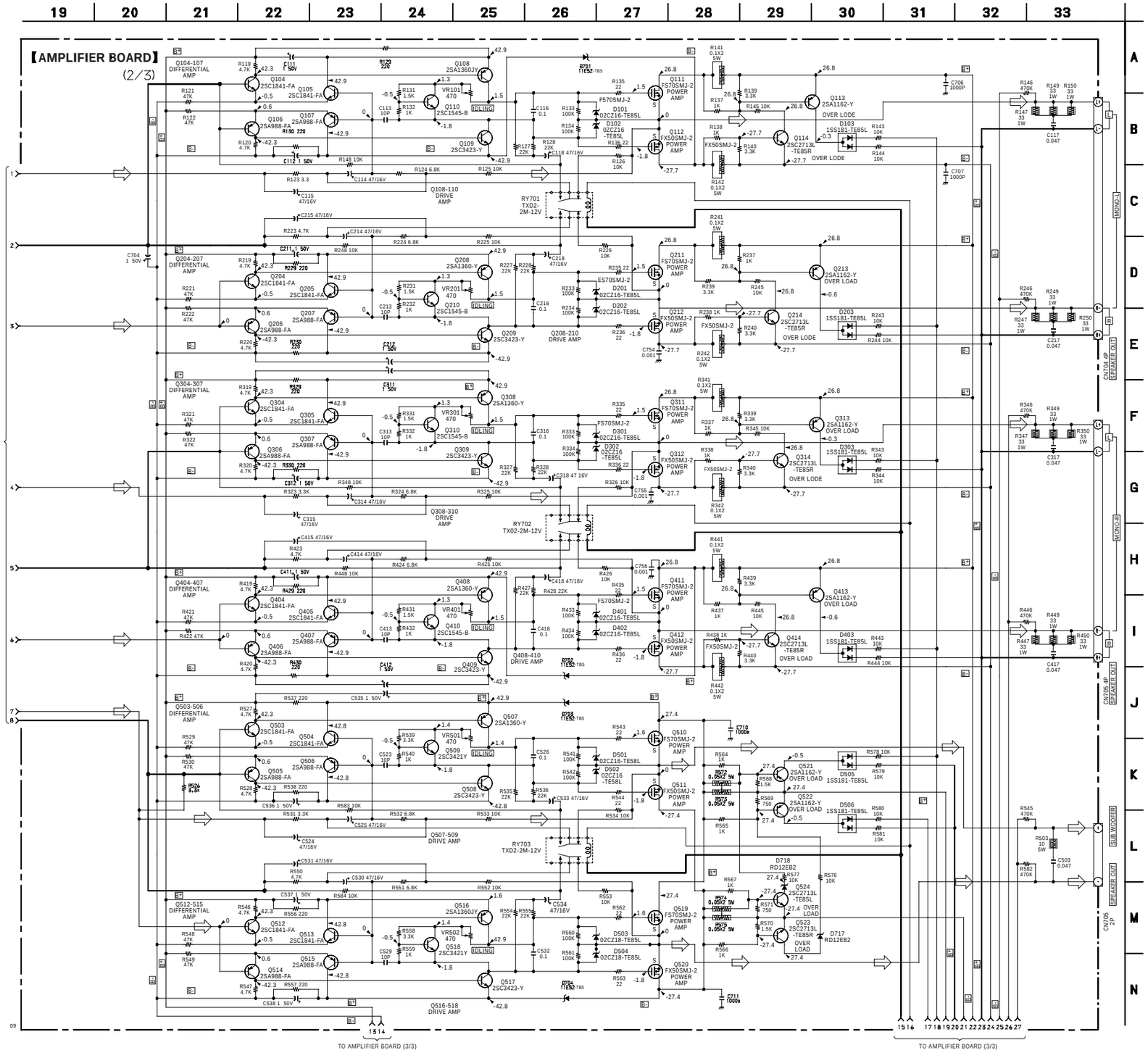
• See page 10 for IC Block Diagram.

• Semiconductor Location

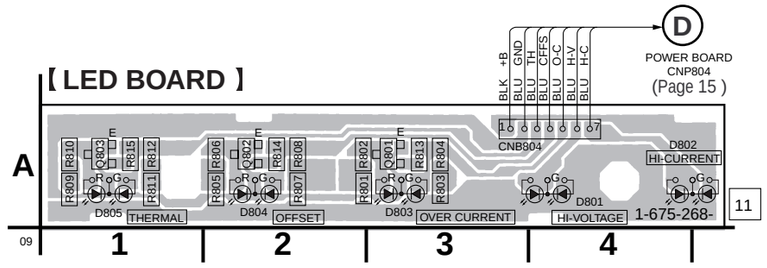
Ref. No.	Location	Ref. No.	Location
D101	G-12	Q211	G-10
D102	G-11	Q212	G-9
D103	D-9	Q213	E-9
D201	G-10	Q214	E-9
D202	G-10	Q301	A-5
D203	E-9	Q302	A-7
D301	G-8	Q303	A-5
D302	G-7	Q304	F-8
D303	E-8	Q305	F-8
D401	G-6	Q306	F-7
D402	G-7	Q307	F-7
D403	E-6	Q308	G-8
D501	G-4	Q309	G-7
D502	G-3	Q310	G-7
D503	G-2	Q311	G-8
D504	G-3	Q312	G-7
D505	E-5	Q313	E-8
D506	E-6	Q314	E-8
D701	G-12	Q401	A-5
D702	F-5	Q402	A-7
D703	F-1	Q403	B-5
D704	G-5	Q404	F-6
D706	E-1	Q405	F-6
D707	C-2	Q406	F-5
D708	D-2	Q407	F-5
D709	D-2	Q408	G-6
D710	D-1	Q409	G-5
D711	D-1	Q410	G-6
D712	D-2	Q411	G-6
D713	D-2	Q412	G-5
D714	D-1	Q413	E-5
D715	D-1	Q414	E-5
D716	D-8	Q503	F-4
D717	E-3	Q504	F-4
D718	D-3	Q505	F-4
		Q506	F-4
IC701	B-10	Q507	G-4
IC702	B-9	Q508	G-4
IC703	B-8	Q509	G-4
IC704	B-7	Q510	G-4
IC705	B-6	Q511	G-3
IC706	B-5	Q512	F-2
		Q513	F-2
Q101	A-10	Q514	F-1
Q102	B-9	Q515	F-1
Q103	B-11	Q516	G-2
Q104	F-12	Q517	G-1
Q105	F-12	Q518	G-2
Q106	F-11	Q519	G-2
Q107	F-11	Q520	G-1
Q108	G-12	Q521	E-4
Q109	G-11	Q522	E-4
Q110	G-11	Q523	E-3
Q111	G-12	Q524	E-3
Q112	G-11	Q701	E-1
Q113	E-12	Q702	E-1
Q114	E-12	Q704	C-2
Q201	A-10	Q705	C-1
Q202	B-9	Q706	C-2
Q203	B-11	Q707	C-10
Q204	F-10	Q708	D-9
Q205	F-10	Q709	D-10
Q206	F-9	Q710	D-8
Q207	F-9	Q711	D-8
Q208	G-10	Q712	D-7
Q209	G-9	Q713	D-7
Q210	G-9		



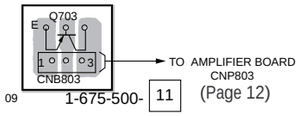
5-8. SCHEMATIC DIAGRAM/PRINTED WIRING BOARD – AMPLIFIER (2/3)/LED/TR SECTION – • See page 10 for IC Block Diagram.



【LED BOARD】



【TR BOARD】

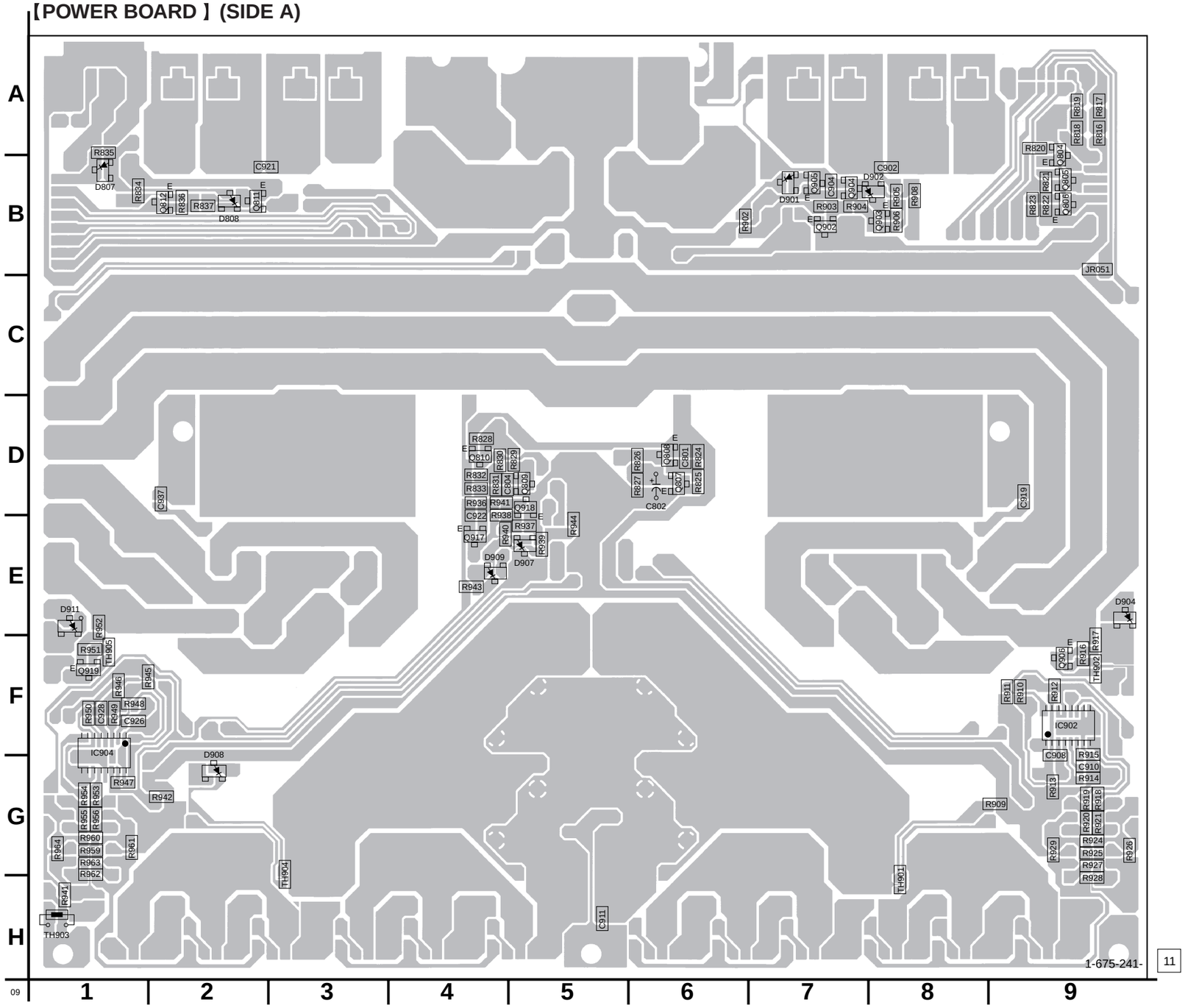


- **Semiconductor Location**

Ref. No.	Location
D801	A-4
D802	A-4
D803	A-3
D804	A-2
D805	A-1
Q801	A-3
Q802	A-2
Q803	A-1

5-9. PRINTED WIRING BOARD – POWER SECTION –

【POWER BOARD 】(SIDE A)



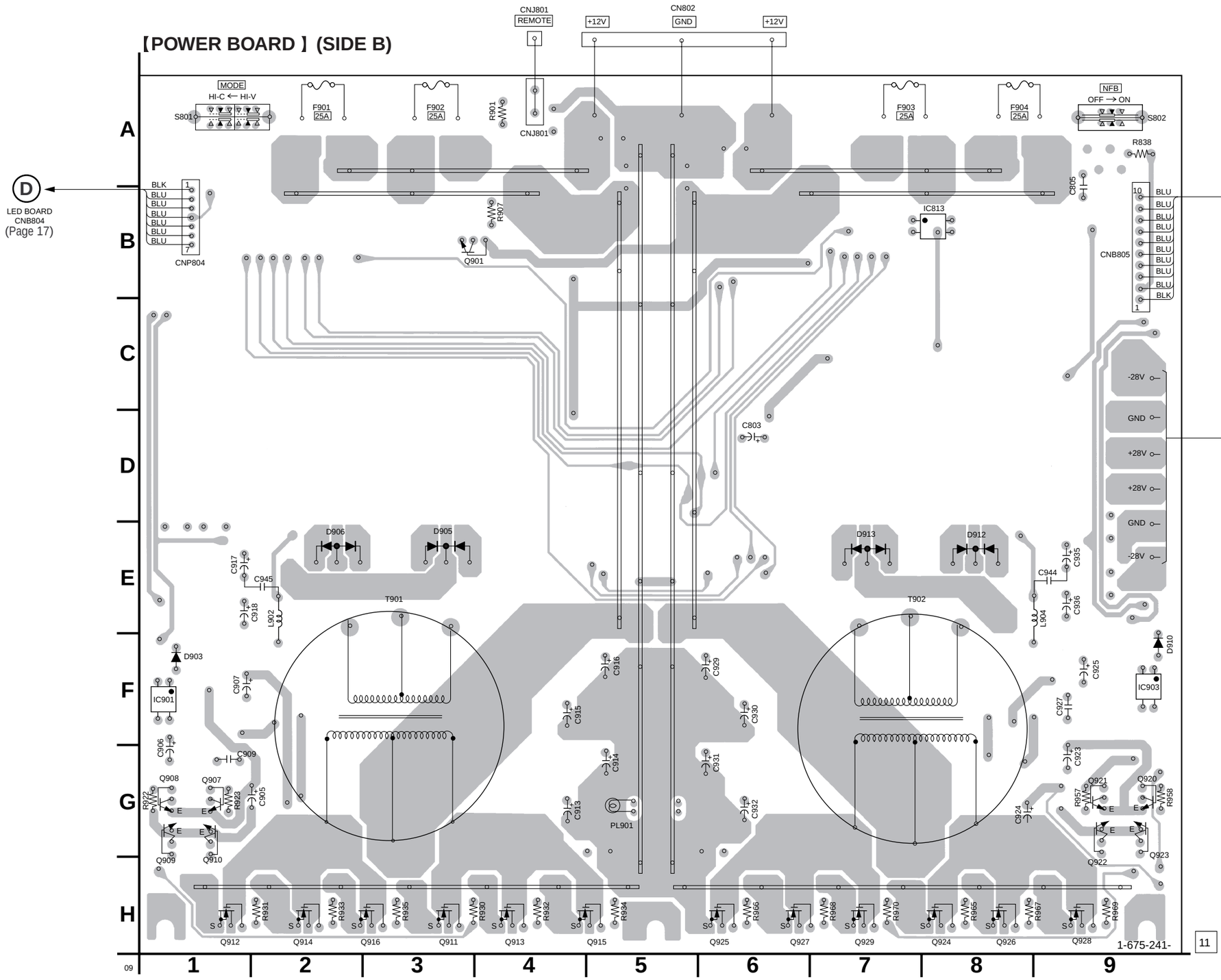
- **Semiconductor Location**

Ref. No.	Location
D903	F-9
D905	E-7
D906	E-8
D910	F-1
D912	E-2
D913	E-3
IC813	B-3
IC901	F-9
IC903	F-1
Q901	B-7
Q907	G-9
Q908	G-9
Q909	G-9
Q910	G-9
Q911	H-7
Q912	H-9
Q913	H-6
Q914	H-8
Q915	H-6
Q916	H-8
Q920	G-1
Q921	G-1
Q922	G-1
Q923	G-1
Q924	H-3
Q925	H-4
Q926	H-2
Q927	H-4
Q928	H-1
Q929	H-3

- **Semiconductor Location**

Ref. No.	Location
D806	E-5
D807	B-1
D808	B-2
D901	B-7
D902	B-7
D904	E-9
D907	E-5
D908	G-2
D909	E-4
D911	E-1
IC902	F-9
IC904	F-1
Q804	B-9
Q805	B-9
Q806	B-9
Q807	D-6
Q808	D-6
Q809	D-5
Q810	D-4
Q811	B-2
Q812	B-2
Q902	B-7
Q903	B-8
Q904	B-7
Q905	B-7
Q906	F-9
Q917	E-4
Q918	D-5
Q919	F-1

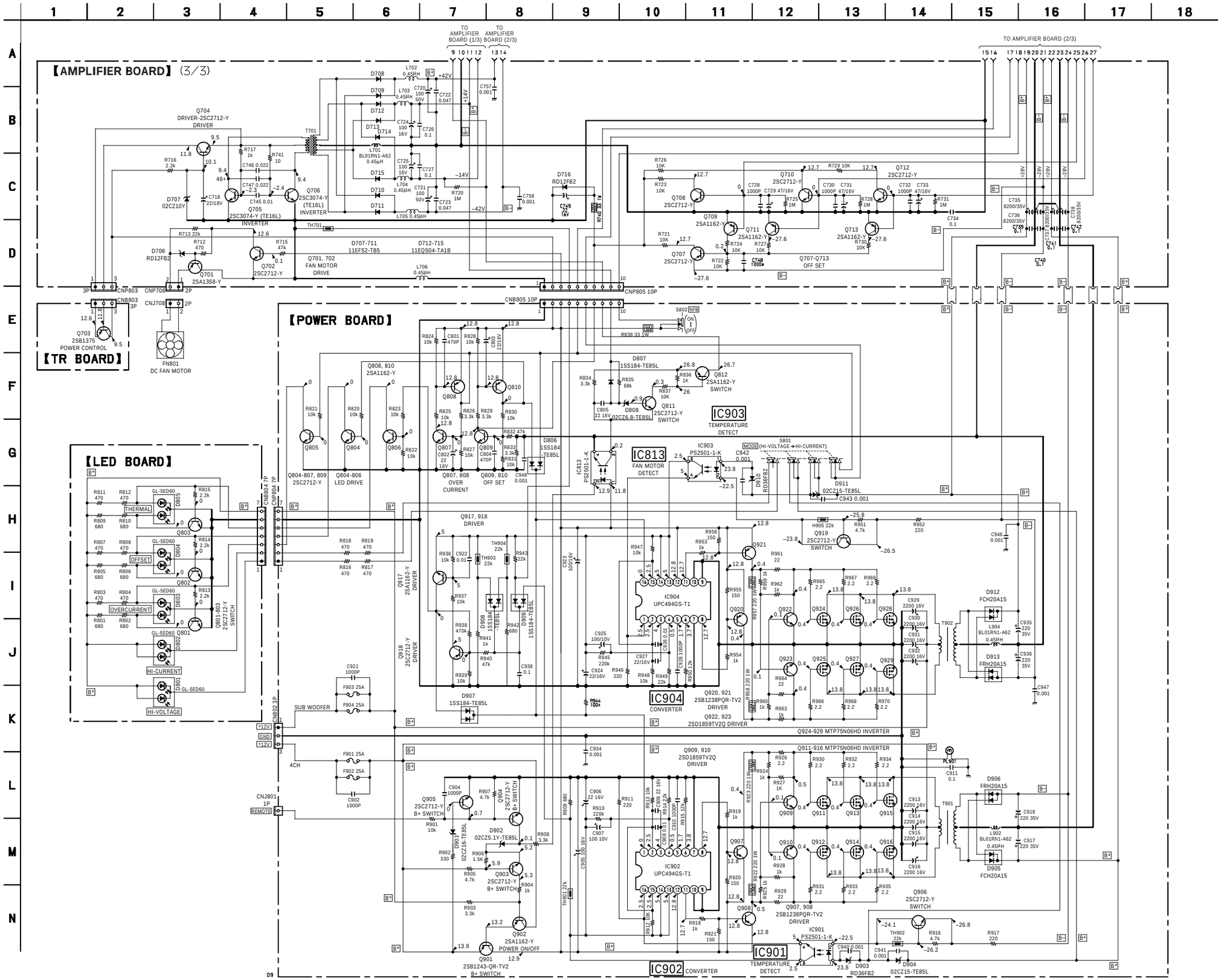
【POWER BOARD 】(SIDE B)



1-675-241-11

5-10. SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3)/TR/LED SECTION –

• See page 10 for IC Block Diagram.

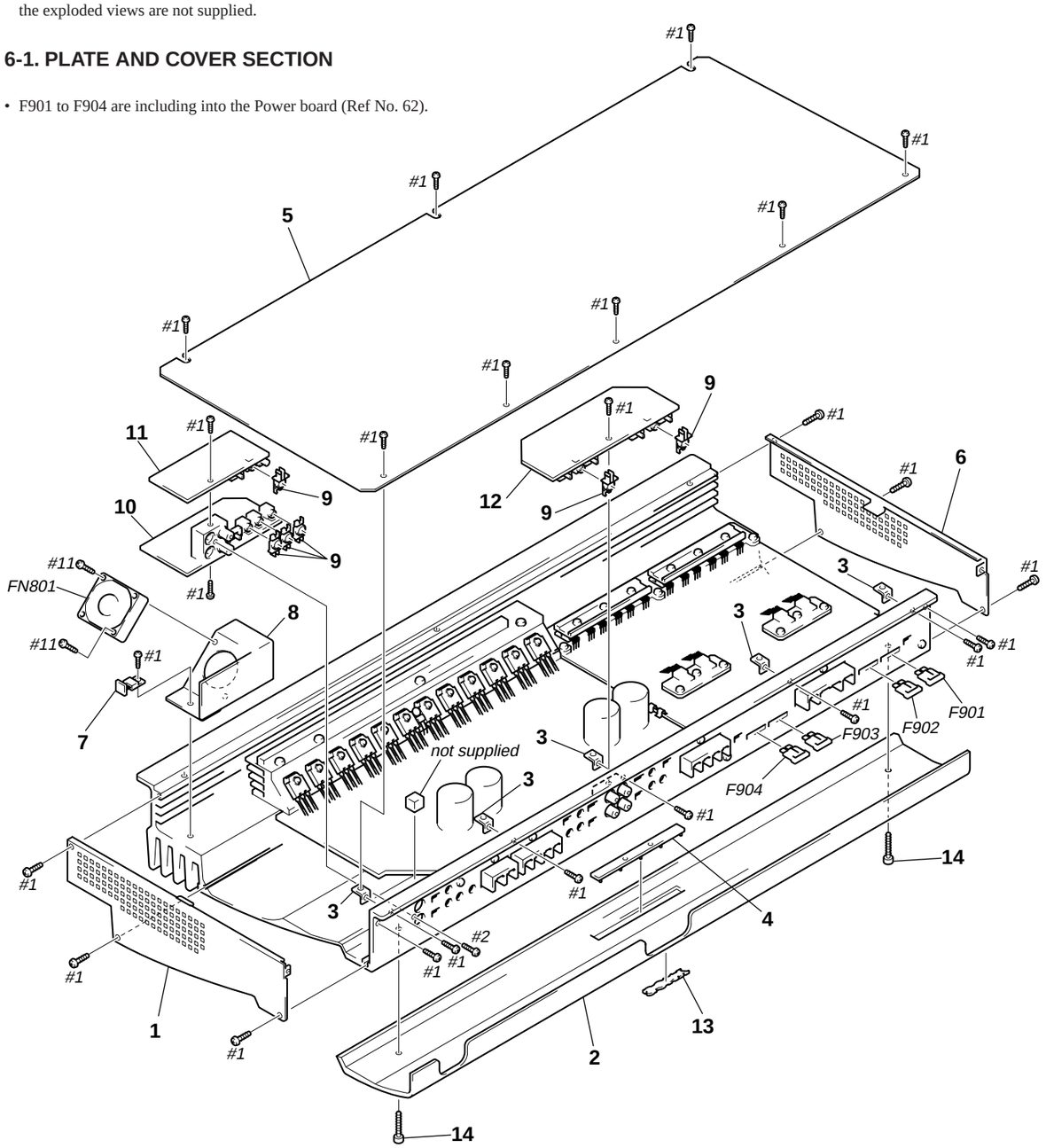


SECTION 6
EXPLODED VIEWS

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

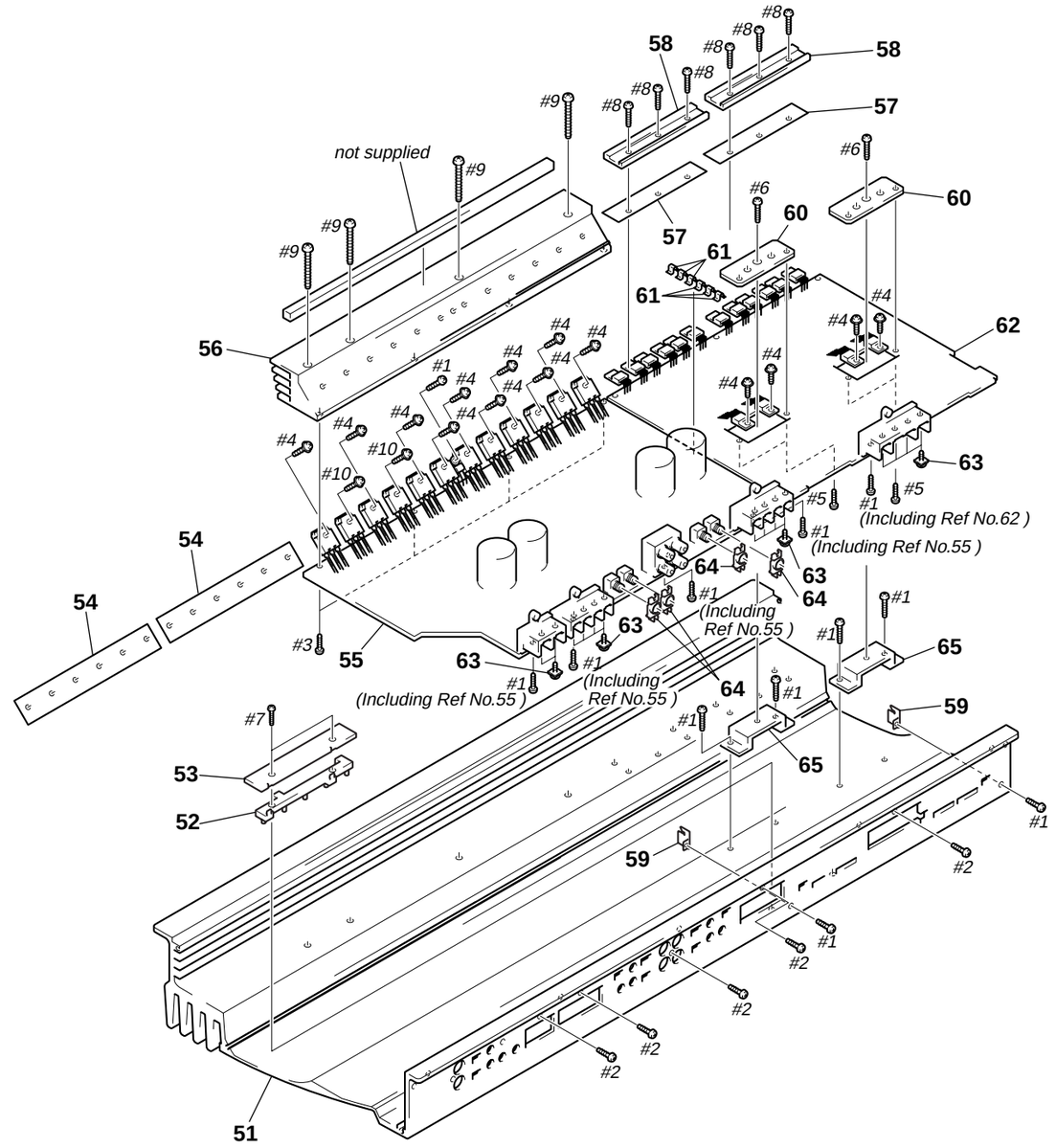
6-1. PLATE AND COVER SECTION

- F901 to F904 are including into the Power board (Ref No. 62).



Ref. No.	Part No.	Description	Remark
* 1	3-039-168-01	PANEL (R), SIDE	
? 2	3-039-219-01	HEATSINK (COVER)	
* 3	3-039-173-01	PLATE (BKT), BOTTOM	
* 4	3-039-170-01	LENS(COVER)	
* 5	3-039-216-01	PLATE, BOTTOM	
* 6	3-039-167-01	PANEL (L), SIDE	
* 7	1-675-500-11	TR BOARD	
* 8	3-039-217-01	BRACKET (FAN)	
* 9	3-039-172-01	HOLDER, VOL	
* 10	1-675-265-11	SUB1 BOARD	
* 11	1-675-266-11	SUB2 BOARD	
* 12	1-675-267-11	FILTER BOARD	
13	3-704-177-11	EMBLEM (No. 7), SONY	
14	3-040-933-01	BOLT, M4 HEXAGON HOLE	
F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
FN801	1-763-419-11	MOTOR, DC FAN	

6-2. BOARD AND HEAT SINK SECTION



Ref. No.	Part No.	Description	Remark
* 51	3-039-225-01	HEAT SINK (US,CND)	
* 51	3-039-225-11	HEAT SINK (AEP,UK,E)	
52	3-039-171-01	HOLDER, LED	
* 53	1-675-268-11	LED BOARD	
* 54	3-039-184-01	SHEET (AMP), INSULATING	
* 55	A-3317-937-A	AMPLIFIER BOARD, COMPLETE	
* 56	3-039-218-01	HEAT SINK (AMPLIFIER), SUB	
* 57	3-039-183-01	SHEET (POWER), INSULATING	
* 58	3-033-321-01	RETAINER	
* 59	3-039-200-01	BRACKET (PWB)	
* 60	3-039-179-01	HEAT SINK, SPACER	
* 61	3-039-180-01	BAR(PC-PC), BUS	
* 62	A-3317-936-A	POWER BOARD, COMPLETE	
63	3-912-431-01	SCREW (P)	
* 64	3-039-172-01	HOLDER, VOL	
* 65	3-039-178-01	HEAT SINK (RECTIFIER), SUB	

SECTION 7
ELECTRICAL PARTS LIST

AMPLIFIER

Note:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  CND : Canadian model

Ref. No.	Part No.	Description			Remark
*	A-3317-937-A	AMPLIFIER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-126-025-11	ELECT	330uF	20%	25V
C102	1-126-047-81	ELECT	4.7uF	20%	50V
C103	1-126-047-81	ELECT	4.7uF	20%	50V
C104	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C105	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C106	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C107	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C108	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C109	1-126-047-81	ELECT	4.7uF	20%	50V
C110	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C111	1-126-044-11	ELECT	1uF	20%	50V
C112	1-126-044-11	ELECT	1uF	20%	50V
C113	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C114	1-126-008-51	ELECT	47uF	20%	16V
C115	1-126-008-51	ELECT	47uF	20%	16V
C116	1-136-165-00	FILM	0.1uF	5%	50V
C117	1-136-161-00	FILM	0.047uF	5%	50V
C118	1-126-008-51	ELECT	47uF	20%	16V
C158	1-163-251-91	CERAMIC CHIP	100PF		50V
C201	1-126-025-11	ELECT	330uF	20%	25V
C202	1-126-047-81	ELECT	4.7uF	20%	50V
C203	1-126-047-81	ELECT	4.7uF	20%	50V
C204	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C205	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C206	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C207	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C208	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C209	1-126-047-81	ELECT	4.7uF	20%	50V
C210	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C211	1-126-044-11	ELECT	1uF	20%	50V
C212	1-126-044-11	ELECT	1uF	20%	50V
C213	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C214	1-126-008-51	ELECT	47uF	20%	16V
C215	1-126-008-51	ELECT	47uF	20%	16V
C216	1-136-165-00	FILM	0.1uF	5%	50V
C217	1-136-161-00	FILM	0.047uF	5%	50V
C218	1-126-008-51	ELECT	47uF	20%	16V
C258	1-163-251-91	CERAMIC CHIP	100PF		50V
C301	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C302	1-126-047-81	ELECT	4.7uF	20%	50V
C303	1-126-047-81	ELECT	4.7uF	20%	50V
C304	1-163-239-11	CERAMIC CHIP	33PF	5%	50V

Ref. No.	Part No.	Description			Remark
C305	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C306	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C307	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C308	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C309	1-126-047-81	ELECT	4.7uF	20%	50V
C310	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C311	1-126-044-11	ELECT	1uF	20%	50V
C312	1-126-044-11	ELECT	1uF	20%	50V
C313	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C314	1-126-008-51	ELECT	47uF	20%	16V
C315	1-126-008-51	ELECT	47uF	20%	16V
C316	1-136-165-00	FILM	0.1uF	5%	50V
C317	1-136-161-00	FILM	0.047uF	5%	50V
C318	1-126-008-51	ELECT	47uF	20%	16V
C358	1-163-251-91	CERAMIC CHIP	100PF		50V
C401	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C402	1-126-047-81	ELECT	4.7uF	20%	50V
C403	1-126-047-81	ELECT	4.7uF	20%	50V
C404	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C405	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C406	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C407	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C408	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C409	1-126-047-81	ELECT	4.7uF	20%	50V
C410	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C411	1-126-044-11	ELECT	1uF	20%	50V
C412	1-126-044-11	ELECT	1uF	20%	50V
C413	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C414	1-126-008-51	ELECT	47uF	20%	16V
C415	1-126-008-51	ELECT	47uF	20%	16V
C416	1-136-165-00	FILM	0.1uF	5%	50V
C417	1-136-161-00	FILM	0.047uF	5%	50V
C418	1-126-008-51	ELECT	47uF	20%	16V
C458	1-163-251-91	CERAMIC CHIP	100PF		50V
C503	1-136-161-00	FILM	0.047uF	5%	50V
C523	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C524	1-126-008-51	ELECT	47uF	20%	16V
C525	1-126-008-51	ELECT	47uF	20%	16V
C526	1-136-165-00	FILM	0.1uF	5%	50V
C529	1-102-508-11	CERAMIC	10PF	0.5PF	50V
C530	1-126-008-51	ELECT	47uF	20%	16V
C531	1-126-008-51	ELECT	47uF	20%	16V
C532	1-136-165-00	FILM	0.1uF	5%	50V
C533	1-126-008-51	ELECT	47uF	20%	16V
C534	1-126-008-51	ELECT	47uF	20%	16V
C535	1-126-044-11	ELECT	1uF		50V

AMPLIFIER

Ref. No.	Part No.	Description			Remark
C536	1-126-044-11	ELECT	1uF		50V
C537	1-126-044-11	ELECT	1uF		50V
C538	1-126-044-11	ELECT	1uF		50V
C701	1-126-010-81	ELECT	220uF	20%	16V
C702	1-126-010-81	ELECT	220uF	20%	16V
C703	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C704	1-126-044-51	ELECT	1uF		50V
C706	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C707	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C710	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C711	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C718	1-126-006-11	ELECT	22uF	20%	16V
C719	1-124-997-11	ELECT	470uF	20%	10V
C720	1-126-052-11	ELECT	100uF	20%	50V
C721	1-126-052-11	ELECT	100uF	20%	50V
C722	1-136-161-00	FILM	0.047uF	5%	50V
C723	1-136-161-00	FILM	0.047uF	5%	50V
C724	1-126-009-81	ELECT	100uF	20%	16V
C725	1-126-009-81	ELECT	100uF	20%	16V
C726	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C727	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C728	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C729	1-126-008-51	ELECT	47uF	20%	16V
C730	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C731	1-126-008-51	ELECT	47uF	20%	16V
C732	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C733	1-126-008-51	ELECT	47uF	20%	16V
C734	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C735	1-131-730-11	ELECT	8200uF		35V
C736	1-131-730-11	ELECT	8200uF		35V
C737	1-131-730-11	ELECT	8200uF		35V
C738	1-131-730-11	ELECT	8200uF		35V
C739	1-136-165-00	FILM	0.1uF	5%	50V
C740	1-136-165-00	FILM	0.1uF	5%	50V
C741	1-136-165-00	FILM	0.1uF	5%	50V
C742	1-136-165-00	FILM	0.1uF	5%	50V
C745	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C746	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C747	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C748	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C749	1-126-006-11	ELECT	22uF	20%	16V
C754	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C755	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C756	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C757	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C758	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN707	1-694-618-11	TERMINAL BOARD 2P (SUB WOOFER (SPEAKER OUT))			
		< JACK >			
CNJ701	1-779-078-21	JACK, PIN 4P (INPUT L/R (MONO))			
		< CONNECTOR >			
CNP702	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P			
CNP703	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P			
* CNP708	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP710	1-564-513-11	PLUG, CONNECTOR 10P			
* CNP803	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CNP805	1-564-513-11	PLUG, CONNECTOR 10P			
		< DIODE >			
D101	8-719-025-50	DIODE 02CZ16-TE85L			
D102	8-719-025-50	DIODE 02CZ16-TE85L			
D103	8-719-820-05	DIODE 1SS181-TE85R			
D201	8-719-025-50	DIODE 02CZ16-TE85L			
D202	8-719-025-50	DIODE 02CZ16-TE85L			
D203	8-719-820-05	DIODE 1SS181-TE85R			
D301	8-719-025-50	DIODE 02CZ16-TE85L			
D302	8-719-025-50	DIODE 02CZ16-TE85L			
D303	8-719-820-05	DIODE 1SS181-TE85R			
D401	8-719-025-50	DIODE 02CZ16-TE85L			
D402	8-719-025-50	DIODE 02CZ16-TE85L			
D403	8-719-820-05	DIODE 1SS181-TE85R			
D501	8-719-025-50	DIODE 02CZ16-TE85L			
D502	8-719-025-50	DIODE 02CZ16-TE85L			
D503	8-719-025-50	DIODE 02CZ16-TE85L			
D504	8-719-025-50	DIODE 02CZ16-TE85L			
D505	8-719-820-05	DIODE 1SS181-TE85R			
D506	8-719-820-05	DIODE 1SS181-TE85R			
D701	8-719-200-82	DIODE 11ES2-TB5			
D702	8-719-200-82	DIODE 11ES2-TB5			
D703	8-719-200-82	DIODE 11ES2-TB5			
D704	8-719-200-82	DIODE 11ES2-TB5			
D706	8-719-160-56	DIODE RD12FB2			
D707	8-719-018-77	DIODE 02CZ10Y			
D708	8-719-987-67	DIODE 11EFS2-TB5			
D709	8-719-987-67	DIODE 11EFS2-TB5			
D710	8-719-987-67	DIODE 11EFS2-TB5			
D711	8-719-987-67	DIODE 11EFS2-TB5			
D712	8-719-210-21	DIODE 11EQS04-TA1B			
D713	8-719-210-21	DIODE 11EQS04-TA1B			
D714	8-719-210-21	DIODE 11EQS04-TA1B			
D715	8-719-210-21	DIODE 11EQS04-TA1B			
D716	8-719-160-56	DIODE RD12FB2			
D717	8-719-100-65	DIODE RD12EB2			
D718	8-719-100-65	DIODE RD12EB2			
		< IC >			
IC701	8-759-711-82	IC NJM4580E(T1)			
IC702	8-759-711-82	IC NJM4580E(T1)			
IC703	8-759-711-82	IC NJM4580E(T1)			
IC704	8-759-711-82	IC NJM4580E(T1)			
IC705	8-759-711-82	IC NJM4580E(T1)			
IC706	8-759-711-82	IC NJM4580E(T1)			
		< COIL >			
L701	1-410-396-71	INDUCTOR 0.45uH			
L702	1-410-396-71	INDUCTOR 0.45uH			
L703	1-410-396-71	INDUCTOR 0.45uH			
L704	1-410-396-71	INDUCTOR 0.45uH			
L705	1-410-396-71	INDUCTOR 0.45uH			

Ref. No.	Part No.	Description		Remark
L706	1-410-396-71	INDUCTOR	0.45uH	
		< TRANSISTOR >		
Q101	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	
Q102	8-729-203-48	TRANSISTOR	2SC3327-A	
Q103	8-729-203-48	TRANSISTOR	2SC3327-A	
Q104	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q105	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q106	8-729-140-82	TRANSISTOR	2SA988-FA	
Q107	8-729-140-82	TRANSISTOR	2SA988-FA	
Q108	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q109	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q110	8-729-954-51	TRANSISTOR	2SC1545-B	
Q111	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q112	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q113	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q114	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	
Q201	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	
Q202	8-729-203-48	TRANSISTOR	2SC3327-A	
Q203	8-729-203-48	TRANSISTOR	2SC3327-A	
Q204	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q205	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q206	8-729-140-82	TRANSISTOR	2SA988-FA	
Q207	8-729-140-82	TRANSISTOR	2SA988-FA	
Q208	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q209	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q210	8-729-954-51	TRANSISTOR	2SC1545-B	
Q211	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q212	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q213	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q214	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	
Q301	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	
Q302	8-729-203-48	TRANSISTOR	2SC3327-A	
Q303	8-729-203-48	TRANSISTOR	2SC3327-A	
Q304	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q305	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q306	8-729-140-82	TRANSISTOR	2SA988-FA	
Q307	8-729-140-82	TRANSISTOR	2SA988-FA	
Q308	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q309	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q310	8-729-954-51	TRANSISTOR	2SC1545-B	
Q311	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q312	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q313	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q314	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	
Q401	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	
Q402	8-729-203-48	TRANSISTOR	2SC3327-A	
Q403	8-729-203-48	TRANSISTOR	2SC3327-A	
Q404	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q405	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q406	8-729-140-82	TRANSISTOR	2SA988-FA	
Q407	8-729-140-82	TRANSISTOR	2SA988-FA	
Q408	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q409	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q410	8-729-954-51	TRANSISTOR	2SC1545-B	
Q411	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q412	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q413	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q414	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	
Q503	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q504	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q505	8-729-140-82	TRANSISTOR	2SA988-FA	
Q506	8-729-140-82	TRANSISTOR	2SA988-FA	
Q507	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q508	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q509	8-729-207-82	TRANSISTOR	2SC3421-Y	
Q510	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q511	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q512	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q513	8-729-184-53	TRANSISTOR	2SC1841-FA	
Q514	8-729-140-82	TRANSISTOR	2SA988-FA	
Q515	8-729-140-82	TRANSISTOR	2SA988-FA	
Q516	8-729-209-18	TRANSISTOR	2SA1360-Y	
Q517	8-729-203-45	TRANSISTOR	2SC3423-Y	
Q518	8-729-207-82	TRANSISTOR	2SC3421-Y	
Q519	8-729-049-52	TRANSISTOR	FS70SMJ-2	
Q520	8-729-049-53	TRANSISTOR	FX50SMJ-2	
Q521	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q522	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q523	8-729-230-51	TRANSISTOR	2SC2712YG-TE85R	
Q524	8-729-230-51	TRANSISTOR	2SC2712YG-TE85R	
Q701	8-729-207-89	TRANSISTOR	2SA1358-Y	
Q702	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q704	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q705	8-729-205-88	TRANSISTOR	2SC3074-Y(TE16L)	
Q706	8-729-205-88	TRANSISTOR	2SC3074-Y(TE16L)	
Q707	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q708	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q709	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q710	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q711	8-729-216-21	TRANSISTOR	2SA1162-Y	
Q712	8-729-230-49	TRANSISTOR	2SC2712-Y	
Q713	8-729-216-21	TRANSISTOR	2SA1162-Y	
		< RESISTOR >		

R101	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R102	1-208-518-61	RES,CHIP	22K	2%	1/10W
R103	1-208-518-61	RES,CHIP	22K	2%	1/10W
R104	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R105	1-208-518-61	RES,CHIP	22K	2%	1/10W
R106	1-208-518-61	RES,CHIP	22K	2%	1/10W
R107	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R108	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R109	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R110	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R111	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R112	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R113	1-208-518-61	RES,CHIP	22K	2%	1/10W
R114	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R115	1-208-510-61	RES,CHIP	10K	2%	1/8W
R116	1-208-510-61	RES,CHIP	10K	2%	1/8W
R117	1-208-462-61	RES,CHIP	10K	2%	1/10W
R118	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R119	1-208-453-61	RES,CHIP	4.7K	2%	1/10W

AMPLIFIER

Ref. No.	Part No.	Description			Remark
R120	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R121	1-216-238-00	RES,CHIP	47K	2%	1/8W
R122	1-216-238-00	RES,CHIP	47K	2%	1/8W
R123	1-249-564-11	CARBON	3.3K	5%	1/4W
R124	1-249-943-11	CARBON	6.8K	5%	1/4W
R125	1-249-576-11	CARBON	10K	5%	1/4W
R126	1-249-576-11	CARBON	10K	5%	1/4W
R127	1-249-955-11	CARBON	22K	5%	1/4W
R128	1-249-955-11	CARBON	22K	5%	1/4W
R129	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R130	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R131	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R132	1-208-437-61	RES,CHIP	1K	2%	1/10W
R133	1-208-534-61	RES,CHIP	100K	2%	1/10W
R134	1-208-534-61	RES,CHIP	100K	2%	1/10W
R135	1-211-960-11	RES,CHIP	22	2%	1/10W
R136	1-211-960-11	RES,CHIP	22	2%	1/10W
R137	1-208-437-61	RES,CHIP	1K	2%	1/10W
R138	1-208-437-61	RES,CHIP	1K	2%	1/10W
R139	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R140	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R141	1-205-991-11	METAL	0.1/0.1	10%	5w F
R142	1-205-991-11	METAL	0.1/0.1	10%	5w F
R143	1-208-462-61	RES,CHIP	10K	2%	1/10W
R144	1-208-462-61	RES,CHIP	10K	2%	1/10W
R145	1-208-462-61	RES,CHIP	10K	2%	1/10W
R146	1-208-550-61	RES,CHIP	470K	2%	1/10W
R147	1-215-860-11	METAL OXIDE	33	5%	1W F
R148	1-208-462-61	RES,CHIP	10K	2%	1/10W
R149	1-215-860-11	METAL OXIDE	33	5%	1W F
R150	1-215-860-11	METAL OXIDE	33	5%	1W F
R201	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R202	1-208-518-61	RES,CHIP	22K	2%	1/10W
R203	1-208-518-61	RES,CHIP	22K	2%	1/10W
R204	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R205	1-208-518-61	RES,CHIP	22K	2%	1/10W
R206	1-208-518-61	RES,CHIP	22K	2%	1/10W
R207	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R208	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R209	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R210	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R211	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R212	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R213	1-208-518-61	RES,CHIP	22K	2%	1/10W
R214	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R215	1-208-510-61	RES,CHIP	10K	2%	1/8W
R216	1-208-510-61	RES,CHIP	10K	2%	1/8W
R217	1-208-462-61	RES,CHIP	10K	2%	1/10W
R218	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R219	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R220	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R221	1-216-238-00	RES,CHIP	47K	2%	1/8W
R222	1-216-238-00	RES,CHIP	47K	2%	1/8W
R223	1-249-568-11	CARBON	4.7K	5%	1/4W
R224	1-249-943-11	CARBON	6.8K	5%	1/4W
R225	1-249-576-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R226	1-249-576-11	CARBON	10K	5%	1/4W
R227	1-249-955-11	CARBON	22K	5%	1/4W
R228	1-249-955-11	CARBON	22K	5%	1/4W
R229	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R230	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R231	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R232	1-208-437-61	RES,CHIP	1K	2%	1/10W
R233	1-208-534-61	RES,CHIP	100K	2%	1/10W
R234	1-208-534-61	RES,CHIP	100K	2%	1/10W
R235	1-211-960-11	RES,CHIP	22	2%	1/10W
R236	1-211-960-11	RES,CHIP	22	2%	1/10W
R237	1-208-437-61	RES,CHIP	1K	2%	1/10W
R238	1-208-437-61	RES,CHIP	1K	2%	1/10W
R239	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R240	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R241	1-205-991-11	METAL	0.1/0.1	10%	5w F
R242	1-205-991-11	METAL	0.1/0.1	10%	5w F
R243	1-208-462-61	RES,CHIP	10K	2%	1/10W
R244	1-208-462-61	RES,CHIP	10K	2%	1/10W
R245	1-208-462-61	RES,CHIP	10K	2%	1/10W
R246	1-208-550-61	RES,CHIP	470K	2%	1/10W
R247	1-215-860-11	METAL OXIDE	33	5%	1W F
R248	1-208-462-61	RES,CHIP	10K	2%	1/10W
R249	1-215-860-11	METAL OXIDE	33	5%	1W F
R250	1-215-860-11	METAL OXIDE	33	5%	1W F
R301	1-208-486-61	RES,CHIP	1K	2%	1/8W
R302	1-208-518-61	RES,CHIP	22K	2%	1/10W
R303	1-208-518-61	RES,CHIP	22K	2%	1/10W
R304	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R305	1-208-518-61	RES,CHIP	22K	2%	1/10W
R306	1-208-518-61	RES,CHIP	22K	2%	1/10W
R307	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R308	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R309	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R310	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R311	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R312	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R313	1-208-518-61	RES,CHIP	22K	2%	1/10W
R314	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R315	1-208-510-61	RES,CHIP	10K	2%	1/8W
R316	1-208-510-61	RES,CHIP	10K	2%	1/8W
R317	1-208-462-61	RES,CHIP	10K	2%	1/10W
R318	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R319	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R320	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R321	1-216-238-00	RES,CHIP	47K	2%	1/8W
R322	1-216-238-00	RES,CHIP	47K	2%	1/8W
R323	1-249-935-11	CARBON	3.3K	5%	1/4W
R324	1-249-943-11	CARBON	6.8K	5%	1/4W
R325	1-249-576-11	CARBON	10K	5%	1/4W
R326	1-249-576-11	CARBON	10K	5%	1/4W
R327	1-249-955-11	CARBON	22K	5%	1/4W
R328	1-249-955-11	CARBON	22K	5%	1/4W
R329	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R330	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R331	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R332	1-208-437-61	RES,CHIP	1K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R333	1-208-534-61	RES,CHIP	100K	2%	1/10W
R334	1-208-534-61	RES,CHIP	100K	2%	1/10W
R335	1-211-960-11	RES,CHIP	22	2%	1/10W
R336	1-211-960-11	RES,CHIP	22	2%	1/10W
R337	1-208-437-61	RES,CHIP	1K	2%	1/10W
R338	1-208-437-61	RES,CHIP	1K	2%	1/10W
R339	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R340	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R341	1-205-991-11	METAL	0.1/0.1	10%	5w F
R342	1-205-991-11	METAL	0.1/0.1	10%	5w F
R343	1-208-462-61	RES,CHIP	10K	2%	1/10W
R344	1-208-462-61	RES,CHIP	10K	2%	1/10W
R345	1-208-462-61	RES,CHIP	10K	2%	1/10W
R346	1-208-550-61	RES,CHIP	470K	2%	1/10W
R347	1-215-860-11	METAL OXIDE	33	5%	1W F
R348	1-208-462-61	RES,CHIP	10K	2%	1/10W
R349	1-215-860-11	METAL OXIDE	33	5%	1W F
R350	1-215-860-11	METAL OXIDE	33	5%	1W F
R401	1-208-486-61	RES,CHIP	1K	2%	1/8W
R402	1-208-518-61	RES,CHIP	22K	2%	1/10W
R403	1-208-518-61	RES,CHIP	22K	2%	1/10W
R404	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R405	1-208-518-61	RES,CHIP	22K	2%	1/10W
R406	1-208-518-61	RES,CHIP	22K	2%	1/10W
R407	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R408	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R409	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R410	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R411	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R412	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R413	1-208-518-61	RES,CHIP	22K	2%	1/10W
R414	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R415	1-208-510-61	RES,CHIP	10K	2%	1/8W
R416	1-208-510-61	RES,CHIP	10K	2%	1/8W
R417	1-208-462-61	RES,CHIP	10K	2%	1/10W
R418	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R419	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R420	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R421	1-216-238-00	RES,CHIP	47K	2%	1/8W
R422	1-216-238-00	RES,CHIP	47K	2%	1/8W
R423	1-249-568-11	CARBON	4.7K	5%	1/4W
R424	1-249-943-11	CARBON	6.8K	5%	1/4W
R425	1-249-576-11	CARBON	10K	5%	1/4W
R426	1-249-576-11	CARBON	10K	5%	1/4W
R427	1-249-955-11	CARBON	22K	5%	1/4W
R428	1-249-955-11	CARBON	22K	5%	1/4W
R429	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R430	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R431	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R432	1-208-437-61	RES,CHIP	1K	2%	1/10W
R433	1-208-534-61	RES,CHIP	100K	2%	1/10W
R434	1-208-534-61	RES,CHIP	100K	2%	1/10W
R435	1-211-960-11	RES,CHIP	22	2%	1/10W
R436	1-211-960-11	RES,CHIP	22	2%	1/10W
R437	1-208-437-61	RES,CHIP	1K	2%	1/10W
R438	1-208-437-61	RES,CHIP	1K	2%	1/10W
R439	1-208-449-61	RES,CHIP	3.3K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R440	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R441	1-205-991-11	METAL	0.1/0.1	10%	5w F
R442	1-205-991-11	METAL	0.1/0.1	10%	5w F
R443	1-208-462-61	RES,CHIP	10K	2%	1/10W
R444	1-208-462-61	RES,CHIP	10K	2%	1/10W
R445	1-208-462-61	RES,CHIP	10K	2%	1/10W
R446	1-208-550-61	RES,CHIP	470K	2%	1/10W
R447	1-215-860-11	METAL OXIDE	33	5%	1W F
R448	1-208-462-61	RES,CHIP	10K	2%	1/10W
R449	1-215-860-11	METAL OXIDE	33	5%	1W F
R450	1-215-860-11	METAL OXIDE	33	5%	1W F
R503	1-217-784-11	FUSIBLE	10	5%	5W F
R526	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R527	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R528	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R529	1-216-238-00	RES,CHIP	47K	2%	1/8W
R530	1-216-238-00	RES,CHIP	47K	2%	1/8W
R531	1-249-564-91	CARBON	3.3K	5%	1/4W
R532	1-249-943-11	CARBON	6.8K	5%	1/4W
R533	1-249-576-11	CARBON	10K	5%	1/4W
R534	1-249-576-11	CARBON	10K	5%	1/4W
R535	1-249-955-11	CARBON	22K	5%	1/4W
R536	1-249-955-11	CARBON	22K	5%	1/4W
R537	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R538	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R539	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R540	1-208-437-61	RES,CHIP	1K	2%	1/10W
R541	1-208-534-61	RES,CHIP	100K	2%	1/10W
R542	1-208-534-61	RES,CHIP	100K	2%	1/10W
R543	1-211-960-11	RES,CHIP	22	2%	1/10W
R544	1-211-960-11	RES,CHIP	22	2%	1/10W
R545	1-208-550-61	RES,CHIP	470K	2%	1/10W
R546	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R547	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R548	1-216-238-00	RES,CHIP	47K	2%	1/8W
R549	1-216-238-00	RES,CHIP	47K	2%	1/8W
R550	1-249-568-11	CARBON	4.7K	5%	1/4W
R551	1-249-943-11	CARBON	6.8K	5%	1/4W
R552	1-249-576-11	CARBON	10K	5%	1/4W
R553	1-249-576-11	CARBON	10K	5%	1/4W
R554	1-249-955-11	CARBON	22K	5%	1/4W
R555	1-249-955-11	CARBON	22K	5%	1/4W
R556	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R557	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R558	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R559	1-208-437-61	RES,CHIP	1K	2%	1/10W
R560	1-208-534-61	RES,CHIP	100K	2%	1/10W
R561	1-208-534-61	RES,CHIP	100K	2%	1/10W
R562	1-211-960-11	RES,CHIP	22	2%	1/10W
R563	1-211-960-11	RES,CHIP	22	2%	1/10W
R564	1-208-437-61	RES,CHIP	1K	2%	1/10W
R565	1-208-437-61	RES,CHIP	1K	2%	1/10W
R566	1-208-437-61	RES,CHIP	1K	2%	1/10W
R567	1-208-437-61	RES,CHIP	1K	2%	1/10W
R568	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R569	1-208-434-61	RES,CHIP	750	2%	1/10W

AMPLIFIER

Ref. No.	Part No.	Description			Remark
R570	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R571	1-208-434-61	RES,CHIP	750	2%	1/10W
R572	1-242-800-11	METAL	0.05/0.05		5w F
R573	1-242-800-11	METAL	0.05/0.05		5w F
R574	1-242-800-11	METAL	0.05/0.05		5w F
R575	1-242-800-11	METAL	0.05/0.05		5w F
R576	1-208-462-61	RES,CHIP	10K	2%	1/10W
R577	1-208-462-61	RES,CHIP	10K	2%	1/10W
R578	1-208-462-61	RES,CHIP	10K	2%	1/10W
R579	1-208-462-61	RES,CHIP	10K	2%	1/10W
R580	1-208-462-61	RES,CHIP	10K	2%	1/10W
R581	1-208-462-61	RES,CHIP	10K	2%	1/10W
R582	1-208-550-61	RES,CHIP	470K	2%	1/10W
R583	1-208-462-61	RES,CHIP	10K	2%	1/10W
R584	1-208-462-61	RES,CHIP	10K	2%	1/10W
R701	1-208-437-61	RES,CHIP	1K	2%	1/10W
R702	1-208-437-61	RES,CHIP	1K	2%	1/10W
R703	1-208-437-61	RES,CHIP	1K	2%	1/10W
R704	1-208-437-61	RES,CHIP	1K	2%	1/10W
R712	1-208-774-11	RES,CHIP	470	2%	1/10W
R713	1-208-518-61	RES,CHIP	22K	2%	1/10W
R715	1-208-526-61	RES,CHIP	47K	2%	1/10W
R716	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R717	1-208-486-61	RES,CHIP	1K	2%	1/8W
R720	1-208-558-61	RES,CHIP	1M	2%	1/10W
R721	1-208-462-61	RES,CHIP	10K	2%	1/10W
R722	1-208-462-61	RES,CHIP	10K	2%	1/10W
R723	1-208-462-61	RES,CHIP	10K	2%	1/10W
R724	1-208-462-61	RES,CHIP	10K	2%	1/10W
R725	1-208-558-61	RES,CHIP	1M	2%	1/10W
R726	1-208-462-61	RES,CHIP	10K	2%	1/10W
R727	1-208-462-61	RES,CHIP	10K	2%	1/10W
R728	1-208-558-61	RES,CHIP	1M	2%	1/10W
R729	1-208-462-61	RES,CHIP	10K	2%	1/10W
R730	1-208-462-61	RES,CHIP	10K	2%	1/10W
R731	1-208-558-61	RES,CHIP	1M	2%	1/10W
R740	1-215-860-11	METAL OXIDE	33	5%	1W F
R741	1-208-486-61	RES,CHIP	1K	2%	1/8W
R874	1-216-121-00	RES,CHIP	1M	5%	1/10W
R877	1-216-121-00	RES,CHIP	1M	5%	1/10W
R882	1-216-121-00	RES,CHIP	1M	5%	1/10W
		< RELAY >			
RY701	1-755-353-11	RELAY			
RY702	1-755-353-11	RELAY			
RY703	1-755-353-11	RELAY			
		< SWITCH >			
S703	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)			
S706	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)			
		< TRANSFORMER >			
T701	1-435-149-11	TRANSFORMER, DC-DC CONVERTER			
		< THERMISTOR >			
TH701	1-809-664-51	THERMISTOR, POSITIVE			

FILTER

Ref. No.	Part No.	Description				Remark
		< VARIABLE RESISTOR >				
VR101	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR201	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR301	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR401	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR501	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR502	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)				
VR701	1-225-648-11	RES, VAR 5K/5K (LEVEL/MIN-MAX)				
VR703	1-225-648-11	RES, VAR 5K/5K (LOW BOOST/0dB-+10dB)				
VR704	1-225-648-11	RES, VAR 5K/5K (LEVEL/MIN-MAX)				
VR706	1-225-648-11	RES, VAR 5K/5K (LOW BOOST/0dB-+10dB)				
**********						
*	1-675-267-11	FILTER (5CH) BOARD				
		**********				
		< CAPACITOR >				
C151	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C152	1-136-167-00	FILM	0.15uF	5%	50V	
C153	1-136-167-00	FILM	0.15uF	5%	50V	
C154	1-136-155-00	FILM	0.015uF	5%	50V	
C155	1-136-155-00	FILM	0.015uF	5%	50V	
C156	1-126-008-51	ELECT	47uF	20%	16V	
C157	1-126-008-51	ELECT	47uF	20%	16V	
C251	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C252	1-136-167-00	FILM	0.15uF	5%	50V	
C253	1-136-167-00	FILM	0.15uF	5%	50V	
C254	1-136-155-00	FILM	0.015uF	5%	50V	
C255	1-136-155-00	FILM	0.015uF	5%	50V	
C256	1-126-008-51	ELECT	47uF	20%	16V	
C257	1-126-008-51	ELECT	47uF	20%	16V	
C351	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C352	1-136-167-00	FILM	0.15uF	5%	50V	
C353	1-136-167-00	FILM	0.15uF	5%	50V	
C354	1-136-155-00	FILM	0.015uF	5%	50V	
C355	1-136-155-00	FILM	0.015uF	5%	50V	
C356	1-126-008-51	ELECT	47uF	20%	16V	
C357	1-126-008-51	ELECT	47uF	20%	16V	
C451	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C452	1-136-167-00	FILM	0.15uF	5%	50V	
C453	1-136-167-00	FILM	0.15uF	5%	50V	
C454	1-136-155-00	FILM	0.015uF	5%	50V	
C455	1-136-155-00	FILM	0.015uF	5%	50V	
C456	1-126-008-51	ELECT	47uF	20%	16V	
C457	1-126-008-51	ELECT	47uF	20%	16V	
C750	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C751	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C752	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C753	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
		< JACK >				
CNJ702	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P				
CNJ703	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P				
		< IC >				
IC707	8-759-711-82	IC NJM4580E(T1)				

Ref. No.	Part No.	Description			Remark
IC708	8-759-711-82	IC NJM4580E(T1)			
IC709	8-759-711-82	IC NJM4580E(T1)			
IC710	8-759-711-82	IC NJM4580E(T1)			
IC711	8-759-711-82	IC NJM4580E(T1)			
IC712	8-759-711-82	IC NJM4580E(T1)			
		< RESISTOR >			
R151	1-208-462-61	RES,CHIP	10K	2%	1/10W
R152	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R153	1-208-518-61	RES,CHIP	22K	2%	1/10W
R154	1-208-462-61	RES,CHIP	10K	2%	1/10W
R155	1-208-462-61	RES,CHIP	10K	2%	1/10W
R156	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R157	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R158	1-208-462-61	RES,CHIP	10K	2%	1/10W
R160	1-208-462-61	RES,CHIP	10K	2%	1/10W
R251	1-208-462-61	RES,CHIP	10K	2%	1/10W
R252	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R253	1-208-518-61	RES,CHIP	22K	2%	1/10W
R254	1-208-462-61	RES,CHIP	10K	2%	1/10W
R255	1-208-462-61	RES,CHIP	10K	2%	1/10W
R256	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R257	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R258	1-208-462-61	RES,CHIP	10K	2%	1/10W
R260	1-208-462-61	RES,CHIP	10K	2%	1/10W
R351	1-208-462-61	RES,CHIP	10K	2%	1/10W
R352	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R353	1-208-518-61	RES,CHIP	22K	2%	1/10W
R354	1-208-462-61	RES,CHIP	10K	2%	1/10W
R355	1-208-462-61	RES,CHIP	10K	2%	1/10W
R356	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R357	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R358	1-208-462-61	RES,CHIP	10K	2%	1/10W
R360	1-208-462-61	RES,CHIP	10K	2%	1/10W
R451	1-208-462-61	RES,CHIP	10K	2%	1/10W
R452	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R453	1-208-518-61	RES,CHIP	22K	2%	1/10W
R454	1-208-462-61	RES,CHIP	10K	2%	1/10W
R455	1-208-462-61	RES,CHIP	10K	2%	1/10W
R456	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R457	1-216-057-61	RES,CHIP	2.2K	5%	1/10W
R458	1-208-462-61	RES,CHIP	10K	2%	1/10W
R460	1-208-462-61	RES,CHIP	10K	2%	1/10W
		< SWITCH >			
S701	1-571-658-11	SWITCH, SLIDE (FILTER, X1/X10)			
S702	1-762-191-11	SWITCH, SLIDE (FILTER, LPF/OFF/HPF)			
S704	1-571-658-11	SWITCH, SLIDE (FILTER, X1/X10)			
S705	1-762-191-11	SWITCH, SLIDE (FILTER, LPF/OFF/HPF)			
		< VARIABLE RESISTOR >			
VR702	1-225-921-11	RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz)			
VR705	1-225-921-11	RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz)			

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Ref. No.	Part No.	Description			Remark
*	1-675-268-11	LED (5CH) BOARD			
		**********			
		< DIODE >			
D801	8-719-076-62	DIODE GL-5ED60 (HI-VOLTAGE)			
D802	8-719-076-62	DIODE GL-5ED60 (HI-CURRENT)			
D803	8-719-076-62	DIODE GL-5ED60 (OVER CURRENT)			
D804	8-719-076-62	DIODE GL-5ED60 (OFFSET)			
D805	8-719-076-62	DIODE GL-5ED60 (THERMAL)			
		< TRANSISTOR >			
Q801	8-729-230-49	TRANSISTOR	2SC2712-Y		
Q802	8-729-230-49	TRANSISTOR	2SC2712-Y		
Q803	8-729-230-49	TRANSISTOR	2SC2712-Y		
		< RESISTOR >			
R801	1-216-194-00	METAL CHIP	680	5%	1/8W
R802	1-216-194-00	METAL CHIP	680	5%	1/8W
R803	1-216-190-00	RES,CHIP	470	2%	1/8W
R804	1-216-190-00	RES,CHIP	470	2%	1/8W
R805	1-216-194-00	METAL CHIP	680	5%	1/8W
R806	1-216-194-00	METAL CHIP	680	5%	1/8W
R807	1-216-190-00	RES,CHIP	470	2%	1/8W
R808	1-216-190-00	RES,CHIP	470	2%	1/8W
R809	1-216-194-00	METAL CHIP	680	5%	1/8W
R810	1-216-194-00	METAL CHIP	680	5%	1/8W
R811	1-216-190-00	RES,CHIP	470	2%	1/8W
R812	1-216-190-00	RES,CHIP	470	2%	1/8W
R813	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R814	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R815	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

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*	A-3317-936-A	POWER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C801	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C802	1-126-006-11	ELECT	22uF	20%	16V
C803	1-126-006-11	ELECT	22uF	20%	16V
C804	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C805	1-107-715-11	ELECT	22uF	20%	16V
C902	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C904	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C905	1-126-009-81	ELECT	100uF	20%	16V
C906	1-126-006-11	ELECT	22uF	20%	16V
C907	1-124-994-11	ELECT	100uF	20%	10V
C908	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C909	1-107-715-11	ELECT	22uF	20%	16V
C910	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C911	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C913	1-131-731-11	ELECT	2200uF		16V
C914	1-131-731-11	ELECT	2200uF		16V
C915	1-131-731-11	ELECT	2200uF		16V
C916	1-131-731-11	ELECT	2200uF		16V
C917	1-104-829-11	ELECT	220uF	20%	35V
C918	1-104-829-11	ELECT	220uF	20%	35V

POWER

Ref. No.	Part No.	Description			Remark
C921	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C922	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C923	1-126-009-81	ELECT	100uF	20%	16V
C924	1-126-006-11	ELECT	22uF	20%	16V
C925	1-124-994-11	ELECT	100uF	20%	10V
C926	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C927	1-107-715-11	ELECT	22uF	20%	16V
C928	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C929	1-131-731-11	ELECT	2200uF		16V
C930	1-131-731-11	ELECT	2200uF		16V
C931	1-131-731-11	ELECT	2200uF		16V
C932	1-131-731-11	ELECT	2200uF		16V
C934	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C935	1-104-829-11	ELECT	220uF	20%	35V
C936	1-104-829-11	ELECT	220uF	20%	35V
C938	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C940	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C941	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C942	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C943	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C944	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C945	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C946	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C947	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C948	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN802	1-694-620-11	TERMINAL BOARD 3P (+12V, GND, +12V)			
		< JACK >			
CNJ801	1-793-279-11	CONNECTOR 1P (REMOTE)			
		< CONNECTOR >			
* CNP804	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
		< DIODE >			
D806	8-719-801-78	DIODE 1SS184-TE85L			
D807	8-719-801-78	DIODE 1SS184-TE85L			
D808	8-719-025-34	DIODE 02CZ6.8-TE85L			
D901	8-719-025-50	DIODE 02CZ16-TE85L			
D902	8-719-043-82	DIODE 02CZ5.1Y-TE85L			
D903	8-719-160-90	DIODE RD36FB2			
D904	8-719-025-49	DIODE 02CZ15-TE85L			
D905	8-719-076-60	DIODE FCH20A15			
D906	8-719-076-61	DIODE FRH20A15			
D907	8-719-801-78	DIODE 1SS184-TE85L			
D908	8-719-801-78	DIODE 1SS184-TE85L			
D909	8-719-801-78	DIODE 1SS184-TE85L			
D910	8-719-160-90	DIODE RD36FB2			
D911	8-719-025-49	DIODE 02CZ15-TE85L			
D912	8-719-076-60	DIODE FCH20A15			
D913	8-719-076-61	DIODE FRH20A15			
		< FUSE >			
F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)			
F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)			

Ref. No.	Part No.	Description	Remark
F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)	
F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)	
		< IC >	
IC813	8-719-156-72	PHOTO COUPLER PS2501-1-K	
IC901	8-719-156-72	PHOTO COUPLER PS2501-1-K	
IC902	8-759-144-88	IC uPC494GS-T1	
IC903	8-719-156-72	PHOTO COUPLER PS2501-1-K	
IC904	8-759-144-88	IC uPC494GS-T1	
		< COIL >	
L902	1-410-396-71	INDUCTOR 0.45uH	
L904	1-410-396-71	INDUCTOR 0.45uH	
		< PILOT LAMP >	
PL901	1-518-540-00	LAMP, PILOT	
		< TRANSISTOR >	
Q804	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q805	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q806	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q807	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q808	8-729-216-21	TRANSISTOR 2SA1162-Y	
Q809	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q810	8-729-216-21	TRANSISTOR 2SA1162-Y	
Q811	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q812	8-729-216-21	TRANSISTOR 2SA1162-Y	
Q901	8-729-046-13	TRANSISTOR 2SB1243-QR-TV2	
Q902	8-729-216-21	TRANSISTOR 2SA1162-Y	
Q903	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q904	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q905	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q906	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q907	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2	
Q908	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2	
Q909	8-729-032-94	TRANSISTOR 2SD1859TV2Q	
Q910	8-729-032-94	TRANSISTOR 2SD1859TV2Q	
Q911	8-729-035-83	TRANSISTOR MTP75N06HD	
Q912	8-729-035-83	TRANSISTOR MTP75N06HD	
Q913	8-729-035-83	TRANSISTOR MTP75N06HD	
Q914	8-729-035-83	TRANSISTOR MTP75N06HD	
Q915	8-729-035-83	TRANSISTOR MTP75N06HD	
Q916	8-729-035-83	TRANSISTOR MTP75N06HD	
Q917	8-729-216-21	TRANSISTOR 2SA1162-Y	
Q918	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q919	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q920	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2	
Q921	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2	
Q922	8-729-032-94	TRANSISTOR 2SD1859TV2Q	
Q923	8-729-032-94	TRANSISTOR 2SD1859TV2Q	
Q924	8-729-035-83	TRANSISTOR MTP75N06HD	
Q925	8-729-035-83	TRANSISTOR MTP75N06HD	
Q926	8-729-035-83	TRANSISTOR MTP75N06HD	
Q927	8-729-035-83	TRANSISTOR MTP75N06HD	
Q928	8-729-035-83	TRANSISTOR MTP75N06HD	
Q929	8-729-035-83	TRANSISTOR MTP75N06HD	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R816	1-216-190-00	RES,CHIP	470	2%	1/8W
R817	1-216-190-00	RES,CHIP	470	2%	1/8W
R818	1-216-190-00	RES,CHIP	470	2%	1/8W
R819	1-216-190-00	RES,CHIP	470	2%	1/8W
R820	1-208-462-61	RES,CHIP	10K	2%	1/10W
R821	1-208-462-61	RES,CHIP	10K	2%	1/10W
R822	1-208-462-61	RES,CHIP	10K	2%	1/10W
R823	1-208-462-61	RES,CHIP	10K	2%	1/10W
R824	1-208-462-61	RES,CHIP	10K	2%	1/10W
R825	1-208-462-61	RES,CHIP	10K	2%	1/10W
R826	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R827	1-208-462-61	RES,CHIP	10K	2%	1/10W
R828	1-208-462-61	RES,CHIP	10K	2%	1/10W
R829	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R830	1-208-462-61	RES,CHIP	10K	2%	1/10W
R831	1-208-462-61	RES,CHIP	10K	2%	1/10W
R832	1-208-526-61	RES,CHIP	47K	2%	1/10W
R833	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R834	1-216-234-00	RES,CHIP	33K	2%	1/8W
R835	1-208-826-11	RES,CHIP	68K	2%	1/10W
R836	1-208-437-61	RES,CHIP	1K	2%	1/10W
R837	1-208-510-61	RES,CHIP	10K	2%	1/8W
R838	1-215-860-11	METAL OXIDE	33	5%	1W F
R901	1-249-576-11	CARBON	10K	5%	1/4W
R902	1-208-474-61	RES,CHIP	330	2%	1/8W
R903	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R904	1-208-486-61	RES,CHIP	1K	2%	1/8W
R905	1-216-214-00	RES,CHIP	4.7K	2%	1/8W
R906	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R907	1-249-568-11	CARBON	4.7K	5%	1/4W
R908	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R909	1-208-433-61	RES,CHIP	680	2%	1/10W
R910	1-218-760-11	RES,CHIP	220K	2%	1/10W
R911	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R912	1-208-462-61	RES,CHIP	10K	2%	1/10W
R913	1-208-462-61	RES,CHIP	10K	2%	1/10W
R914	1-208-518-61	RES,CHIP	22K	2%	1/10W
R915	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R916	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R917	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R918	1-208-437-61	RES,CHIP	1K	2%	1/10W
R919	1-208-437-61	RES,CHIP	1K	2%	1/10W
R920	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R921	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R922	1-215-865-11	METAL OXIDE	220	5%	1W F
R923	1-215-865-11	METAL OXIDE	220	5%	1W F
R924	1-208-437-61	RES,CHIP	1K	2%	1/10W
R925	1-208-437-61	RES,CHIP	1K	2%	1/10W
R926	1-208-397-61	RES,CHIP	22	2%	1/8W
R927	1-208-437-61	RES,CHIP	1K	2%	1/10W
R928	1-208-437-61	RES,CHIP	1K	2%	1/10W
R929	1-208-397-61	RES,CHIP	22	2%	1/8W
R930	1-220-852-11	CARBON	2.2	5%	1/4W
R931	1-220-852-11	CARBON	2.2	5%	1/4W
R932	1-220-852-11	CARBON	2.2	5%	1/4W
R933	1-220-852-11	CARBON	2.2	5%	1/4W
R934	1-220-852-11	CARBON	2.2	5%	1/4W
R935	1-220-852-11	CARBON	2.2	5%	1/4W
R936	1-208-462-61	RES,CHIP	10K	2%	1/10W
R937	1-208-462-61	RES,CHIP	10K	2%	1/10W
R938	1-208-550-61	RES,CHIP	470K	2%	1/10W
R939	1-208-462-61	RES,CHIP	10K	2%	1/10W
R940	1-208-526-61	RES,CHIP	47K	2%	1/10W
R941	1-208-437-61	RES,CHIP	1K	2%	1/10W
R942	1-208-433-61	RES,CHIP	680	2%	1/10W
R943	1-208-518-61	RES,CHIP	22K	2%	1/10W
R944	1-208-534-61	RES,CHIP	100K	2%	1/10W
R945	1-218-760-11	RES,CHIP	220K	2%	1/10W
R946	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R947	1-208-462-61	RES,CHIP	10K	2%	1/10W
R948	1-208-462-61	RES,CHIP	10K	2%	1/10W
R949	1-208-518-61	RES,CHIP	22K	2%	1/10W
R950	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R951	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R952	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R953	1-208-437-61	RES,CHIP	1K	2%	1/10W
R954	1-208-437-61	RES,CHIP	1K	2%	1/10W
R955	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R956	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R957	1-215-865-11	METAL OXIDE	220	5%	1W F
R958	1-215-865-11	METAL OXIDE	220	5%	1W F
R959	1-208-437-61	RES,CHIP	1K	2%	1/10W
R960	1-208-437-61	RES,CHIP	1K	2%	1/10W
R961	1-208-397-61	RES,CHIP	22	2%	1/8W
R962	1-208-437-61	RES,CHIP	1K	2%	1/10W
R963	1-208-437-61	RES,CHIP	1K	2%	1/10W
R964	1-208-397-61	RES,CHIP	22	2%	1/8W
R965	1-220-852-11	CARBON	2.2	5%	1/4W
R966	1-220-852-11	CARBON	2.2	5%	1/4W
R967	1-220-852-11	CARBON	2.2	5%	1/4W
R968	1-220-852-11	CARBON	2.2	5%	1/4W
R969	1-220-852-11	CARBON	2.2	5%	1/4W
R970	1-220-852-11	CARBON	2.2	5%	1/4W
		< SWITCH >			
S801	1-571-658-11	SWITCH, SLIDE (MODE, HI-C/HI-V)			
S802	1-692-721-11	SWITCH, SLIDE (NFB, ON/OFF)			
		< TRANSFORMER >			
T901	1-435-148-11	TRANSFORMER, DC-DC CONVERTER			
T902	1-435-148-11	TRANSFORMER, DC-DC CONVERTER			
		< THERMISTOR >			
TH901	1-810-506-11	THERMISTOR NTH5G39B223K01			
TH902	1-810-506-11	THERMISTOR NTH5G39B223K01			
TH903	1-810-506-11	THERMISTOR NTH5G39B223K01			
TH904	1-810-506-11	THERMISTOR NTH5G39B223K01			
TH905	1-810-506-11	THERMISTOR NTH5G39B223K01			

****

SUB 1 SUB 2

Ref. No.	Part No.	Description			Remark
*	1-675-265-11	SUB 1 (5CH) BOARD			
		**********			
		< CAPACITOR >			
C501	1-126-025-11	ELECT	330uF	20%	25V
C502	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C504	1-126-047-81	ELECT	4.7uF	20%	50V
C505	1-126-047-81	ELECT	4.7uF	20%	50V
C506	1-126-047-81	ELECT	4.7uF	20%	50V
C507	1-126-047-81	ELECT	4.7uF	20%	50V
C508	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C509	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C510	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C511	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C512	1-126-047-81	ELECT	4.7uF	20%	50V
C513	1-126-047-81	ELECT	4.7uF	20%	50V
C518	1-126-044-11	ELECT	1uF	20%	50V
C519	1-126-044-11	ELECT	1uF	20%	50V
C520	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C714	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C715	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C716	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C717	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C743	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C744	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
		< JACK >			
CNJ706	1-770-068-91	JACK, PIN 2P (INPUT)			
		< CONNECTOR >			
CNP709	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P			
		< DIODE >			
D705	8-719-801-78	DIODE 1SS184-TE85L			
		< IC >			
IC713	8-759-711-82	IC NJM4580E(T1)			
IC714	8-759-711-82	IC NJM4580E(T1)			
IC715	8-759-711-82	IC NJM4580E(T1)			
IC716	8-759-711-82	IC NJM4580E(T1)			
		< TRANSISTOR >			
Q501	8-729-203-48	TRANSISTOR	2SC3327-A		
Q502	8-729-203-48	TRANSISTOR	2SC3327-A		
		< RESISTOR >			
R501	1-216-210-00	RES,CHIP	3.3K	2%	1/8W
R502	1-208-486-61	RES,CHIP	1K	2%	1/8W
R504	1-208-518-61	RES,CHIP	22K	2%	1/10W
R505	1-208-518-61	RES,CHIP	22K	2%	1/10W
R506	1-208-518-61	RES,CHIP	22K	2%	1/10W
R507	1-208-518-61	RES,CHIP	22K	2%	1/10W
R508	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R509	1-208-462-61	RES,CHIP	10K	2%	1/10W
R510	1-208-462-61	RES,CHIP	10K	2%	1/10W
R511	1-208-518-61	RES,CHIP	22K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R512	1-208-518-61	RES,CHIP	22K	2%	1/10W
R513	1-216-631-11	METAL CHIP	150	0.5%	1/10W
R514	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R515	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R518	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W
R519	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R520	1-208-789-11	RES,CHIP	2K	2%	1/10W
R521	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R522	1-208-437-61	RES,CHIP	1K	2%	1/10W
R523	1-208-510-61	RES,CHIP	10K	2%	1/8W
R524	1-208-510-61	RES,CHIP	10K	2%	1/8W
R525	1-208-462-61	RES,CHIP	10K	2%	1/10W
R705	1-208-462-61	RES,CHIP	10K	2%	1/10W
R706	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R707	1-208-539-11	RES,CHIP	160K	2%	1/10W
R708	1-208-539-11	RES,CHIP	160K	2%	1/10W
R709	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R710	1-208-462-61	RES,CHIP	10K	2%	1/10W
R711	1-208-437-61	RES,CHIP	1K	2%	1/10W
R714	1-208-437-61	RES,CHIP	1K	2%	1/10W
R718	1-208-462-61	RES,CHIP	10K	2%	1/10W
R719	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
R738	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R739	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
		< SWITCH >			
S708	1-692-721-11	SWITCH, SLIDE (MODE, LEVEL/BOOST)			(US/CND)
S709	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)			
		< VARIABLE RESISTOR >			
VR708	1-225-648-11	RES, VAR 5K/5K (LEVEL, MIN/MAX)			
VR709	1-225-923-11	RES, VAR 20K/20K (BOOST LOW CUT FREQ/7Hz-40Hz)			
VR710	1-225-648-11	RES, VAR 5K/5K (BOOST LEVEL/0dB-+10dB)			
**********					
*	1-675-266-11	SUB 2 (5CH) BOARD			
		**********			
		< CAPACITOR >			
C514	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (US/CND)
C515	1-126-008-51	ELECT	47uF	20%	16V (US/CND)
C516	1-164-222-11	CERAMIC CHIP	0.22uF		25V
		< JACK >			
CNJ709	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P			
CNJ711	1-566-865-21	JACK, MODULAR (US/CND)			
		< RESISTOR >			
R516	1-208-449-61	RES,CHIP	3.3K	2%	1/10W
R517	1-208-453-61	RES,CHIP	4.7K	2%	1/10W
		< SWITCH >			
S707	1-692-721-11	SWITCH, SLIDE (INPUT MODE/F←→F+R)			

Ref. No.	Part No.	Description	Remark
S710	1-771-802-11	SWITCH (TEST TONE)	
		< VARIABLE RESISTOR >	
VR707	1-225-922-11	RES, VAR 20K/20K (FILTER/50Hz-200Hz)	
**********			
*	1-675-500-11	TR BOARD *********	
		< TRANSISTOR >	
Q703	8-729-141-83	TRANSISTOR 2SB1375	
**********			
		MISCELLANEOUS **********	
F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
FN801	1-763-419-11	MOTOR, DC FAN	
**********			
		ACCESSORIES **********	
	3-867-642-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH)	
	3-867-642-21	MANUAL, INSTRUCTION (GERMAN,ITALIAN)(AEP,UK,E)	
	3-867-642-31	MANUAL, INSTRUCTION (SPANISH,PORTUGUESE)(AEP,UK,E)	
	3-867-642-41	MANUAL, INSTRUCTION (DUTCH,SWEDISH)(AEP,UK,E)	
	3-867-642-51	MANUAL, INSTRUCTION (RUSSIAN)(AEP,UK,E)	
**********			
		HARDWARE LIST **********	
#1	7-685-546-19	SCREW (+BTP3X8) TYPE2 N-S	
#2	7-685-548-19	SCREW (+BTP3X12) TYPE2 N-S	
#3	7-685-145-19	SCREW (+P3X6) TYPE2 NON-SLIT	
#4	7-685-147-11	SCREW (+P3X10) TYPE2 NON-SLIT	
#5	7-685-146-19	SCREW (+P3X8) TYPE2 NON-SLIT	
#6	7-685-647-79	SCREW (+BVTP3X10) TYPE2 IT-3	
#7	7-685-106-11	SCREW (+P2X10) TYPE2 NON-SLIT	
#8	7-685-649-79	SCREW (+BVTP3X14) TYPE2 IT-3	
#9	7-685-168-11	SCREW (+P4X40) TYPE2 NON-SLIT	
#10	7-685-149-11	SCREW (+P3X14) TYPE2 NON-SLIT	
#11	7-685-795-01	SCREW +PTT2.6X12 (S)	

9-926-590-11

Sony Corporation
Mobile Electronics Company

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